DIALYSIS: A MAN, A LIFE

A Documentary Film

Presented to

The Faculty of the Graduate School

University of Missouri

with an Appended Account

of its Research Objectives

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

By

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A copy of the documentary film is deposited in the Ellis Library of the University of Missouri, Columbia, Missouri.

The film was produced for the Missouri Regional Medical Program. The findings, conclusions, and film presentation do not necessarily represent the views of the Program, nor of the U.S. Public Health Service.

Dialysis: A Man, A Life

Research Objectives

(Presented as adjunct to

the documentary film)

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This project is dedicated to: my wife, because she recognized the true goal and helped me to achieve it; and to Chuck and Beverly, who with all their own problems still wanted to help others.

PREFACE

"Dialysis: A Man, A Life" is a film about the life one man leads with the help of an artificial kidney machine. The film's purpose is to give the audience, in this case lay members of the public, a feeling for his normality, within a perspective of his abnormality. The viewer should feel that Chuck is like any other man except for the 14 to 16 hours each week he spends tied to a machine that performs the functions of a human kidney.

The intention is to show Chuck and his wife Beverly as they really are, struggling against what could be a fatal affliction, yet coping well and successfully dealing with all the other aspects of a normal life. Chuck and Bev are typical of the more successful home dialysis cases; they represent the most successful aspects of medical innovation and progress in the area of kidney disease. Admittedly, the more pessimistic aspects of this problem have been avoided in favor of accomplishing the purpose of the film.

The attempt is made to show that dialysis, at its best, is a highly palatable alternative to death. Little effort is made to explain how dialysis works or how people get kidney disease; these are matters for other films. The message is a simple one; if the film effectively conveys it, the cause of medical progress in this field will be advanced. Favorable public attitude is crucial to progress in research

by the medical profession.

The public's values and attitudes have a direct effect on the amount of financial and human resources, public and private, channeled into medical research and innovation.

The medical profession has apparently been relatively ineffective in its attempt to communicate to the lay public, according to a report by Professor W. Stephenson, for the Missouri Regional Medical Program: he concluded ". . . not much is gained communicatively by giving people more and more information (or facts) about things--instead they have to be approached in terms of what matters to them, and this, in the final analysis, means their values, beliefs, and opinions."[1]

This project represents an attempt to overcome this communication pitfall by telling the story through the eyes of the patient: the film conveys a simple message that is more attitudinal and subjective, than informational. This is not to say the film is void of informational content. In the editing process every line has been carefully weighed to measure its informational content. After all, information is a contributing source to public opinion. In the documentary, however, facts are presented in very low key, often in the dialogue of semi-dramatic situations. Information is secondary--the viewer's immediate experience is

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[1] William Stephenson, Ph.D., "Vergent Report, Communications Research Unit," for Missouri Regional Medical Program, (unpublished report, 1971), p. 3.

primary.

No script was used in the making of this film, for which the verite style of shooting was used. The camera crew went out to gather as much visual information about the main characters as it could. This philosophy of film maintains the film-maker should not attempt to shape his subject in any way; the intention is to capture reality with the camera.

This principle was followed only through the actual filming in the present case; a directed approach based on research replaced the verite method in the editing process. A detailed discussion on this is found in the Section IV on the film.

The documentary was conceived as a research project; data were gathered from a thorough study of kidney disease and dialysis, on the basis of which to create the film. Research has not been considered a limitation, but rather an essential tool in pointing out the directions most likely to lead us to success in our purpose. Charles Mauldin considered this process in his paper "Closing the Gap Between Communication Research and Communication."[2] This project represents an attempt to utilize Mr. Mauldin's theory in a practical effort to communicate through film.

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[2]Charles R. Mauldin, "Closing the Gap Between Communication Research and Communication," (a paper presented to the Association for Education in Journalism, August 1971).

Section I: The Basic Approach

The Research Problem

Most films on medical subjects produced for general audiences are didactic. They are typified by the appearance of a doctor who speaks to the camera voicing the authority of the medical profession on some particular medical problem. Professor William Stephenson and the Communications Research Unit (CRU) of Missouri Regional Medical Program (MRMP) devoted considerable effort to examining such films over a period of several years. The focus of Stephenson's approach to medical films (and all film for that matter) is stated precisely in the following statement from the final CRU report:

> Theoretically, it is a matter of what people can identify with. Communication studies show that very few people can identify with the burgeoning flow of facts thrown at them in pamphlets, articles, and medical of health films. It is very natural for those of us who know what is wrong, or who know the facts, to think that we merely have to tell people what we know, "to give them the facts," and they will understand. We try to make the facts "interesting" with plenty of diagrams, colored films and expert "writing." This may lead to some gain in understanding, but not at all to gain in desirable courses of action. Film after film on medical topics examined by CRU, and pamphlet after pamphlet, are fact oriented; all, instead, should be people-oriented, i.e. the scripts all need a 180 degree turn about, to be written from the standpoint of the viewer or reader, not that of the educator or communicator. This explains why medical films for the public, and pamphlets, have been relatively ineffective.

One of the communications studies to which Stephenson refers is Miss Karen Hunt's M.A. thesis, "A Comparison of Two Medical Films," in which Miss Hunt tested the communication effect of two medical films. She concluded there are two essential conditions for effective film communication: 1) the film must make use of existing schemata within the viewer's frame of reference;[3] and 2) the film must make it easy for the viewer to identify with the theme or content.[4] "Because how one perceives a situation depends on his own schemata, the film, must, therefore, be in tune with his perceptions . . . Where there is no identification, the film can have little meaning for the persons, except what they can say rationally, critically, with indifferent detachment about it."[5] This is contrasted by Miss Hunt against the more traditional "objective" methods of film evaluation,which place little if any emphasis on approaching film communication through the personal subjectivity of the intended viewer.

As part of the preparation for the film produced in this project two films provided by the Metropolitan Kidney Foundation of St. Louis were examined and tested for their effectiveness in communication to the public. The first film, "Management of Chronic Renal Disease," produced under

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[3]Karen Hunt, "A Comparison of Two Medical Films," (unpublished M.S. thesis, University of Missouri, 1972), p.19.

[4]Ibid., pp. 9-12.

[5]Ibid., pp. 101.

the auspices of the National Institute of Health and the National Kidney Foundation, was admittedly designed to be shown to doctors; the copy-testing[6] indicated the film was far too technical for laymen. The second film, "Lifeline to Tomorrow," produced for Travenol Laboratories, Inc., was very formal in its approach with long sequences devoted to various doctors and technicians talking to the camera about the problems associated with kidney disease. The film was didactic with very little presentation from the patient's point of view. The reactions of the viewers confirmed the points made by Stephenson in the CRU report.

The immediate problem became how to structure a film, in this case about kidney disease and dialysis, utilizing the subjective approach to enhance viewer identification.

Subsequently one has to consider how to test the film, to determine whether this objective has been achieved.

Method

Two approaches were possible, one being the traditional creative effort of the film-maker, based on his experience and perceptions. The film-maker would be left to his own professional devices; but one could subsequently test his film for its identification possibilities.

The other approach, followed in the present case, seeks to bring research directly and systematically to

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[6] Stephenson, op. cit.

bear on film-making.

Any film-maker, ordinarily, would undertake some study of the subject of the film he is about to produce; he may indeed say that "research" of some kind must precede any film. In the present case, however, research of a systematic nature is contemplated, born of film theory such as Stephenson[7] and Hunt[8] describe. Thus, if a film is to be such as "the public can identify with it," means have to be found to determine what it is--in this case about dialysis--that lay members of the public are apt to find self-involving. Q-methodology[9] serves this purpose.

Means have then to be found to link such research data to the creative work of editing and composing a verite film. For this purpose copy-testing of significant film sequences can be undertaken, to determine how far, in point of fact, lay members of the public can identify with the sequences.

But knowledge of film theory also indicates that the crucial problem occurs when a film is directed at bringing about change of attitude in important segments of an audience. It is easy to make films on the hazards of cigarettes with which non-smokers can identify, but apparently extremely

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[7] Ibid.

[8] Hunt, op. cit.

[9] W. Stephenson, The Study of Behavior: Q-Technique and Its Methodology, 1953.

difficult to achieve identification to the end by smokers. The present film was meant to reach into lay members who are currently adverse to dialysis and its problems, as well as to reinforce those who are familiar with these.

Again, it was assumed that Q-data would assist at this central point, by providing the film-maker with awareness, at least, of the problem.

Q-data, therefore, can be expected to tell the film-maker something cogent about the subjectivity of a film's intended audience; periodic copy-testing of sequences can help to keep him on the appropriate identification lines; these aids should assist him in his creative effort. In this way he has not left the effectiveness of his communication effort to chance; rather, he has structured a specific format in terms designed to enhance viewer identification.

Briefly, therefore: the documentary was to be filmed according to the verite method; what to film, however, was to be determined largely by a Q-method study of lay members of the public; what to compose, in editing the documentary, was also to be governed by Q-data wherever possible.

The method is clearly exploratory only: but the documentary itself, and its objectives, can be tested to determine how far these exploratives have been successful.

Prior Research

For prior research along the lines of the present reference should be made to Stephenson's "Vergent Report" (1971), and to Karen Hunt's M.A. thesis "A Comparison of

Two Medical Films," (University of Missouri, December 1971): both use Q-methodology.

The subject,kidney disease and dialysis (the use of the artificial kidney machine), was approached in the most general sense, despite the fact that Missouri Regional Medical Program (MRMP) indicated several areas needing investigation. MRMP recognized a need for many mass media contributions in this field, but left it to the researcher to decide just what audience they wanted to speak to and what they wanted to say.

Q-methodology was chosen for the pre-film research in this present case primarily because of the type of data it yields. As previously stated, in making a film the film-maker should be interested in the subjectivity of his audience. He wants the audience to identify with the characters, and through that identification project themselves into the film. Q allows respondents to model their own attitudes about the subject, in their own frames of reference, i.e, using their own subjectivity. The abductive approach assumes no prior limits to the subject being studied; the limits of the inquiry are defined by what is relevant to the respondents. An example of the opposite would be the specific limitations set up by a questionnaire. Q assumes the researcher has no way of defining the limits of his subject, thus he abductively pulls in all that is relevant. Q, therefore, theoretically eliminates much of the bias on the part of the researchers and in this case the film-maker.

Section II: Existing Schemata

Gathering of Information

The first step in a Q-study is intensive depth interviewing with representatives of groups that might have different attitudes toward the subject, in this case, kidney dialysis. In the present case it seemed important to interview people deeply involved in kidney dialysis, as well as those with little involvement.

The interviewer approaches his subjects (interviewees) with a minimum of predetermined assumptions. The interviews let the respondent go in whatever direction he wants as long as it pertains to the general subject of kidney disease. Interviews were begun by asking the subject merely to talk about his own thought and experiences with kidney disease and the artificial kidney machine. Each subject was encouraged to proceed in any direction he felt important. The only structured segment of the interview was the specific questioning to determine personal knowledge of the subject. These questions were asked just before the conclusion of the interview. This method of interviewing worked well because it was necessary to explore every aspect of the subject that could be common to the apperceptions of interviewees.

Depth interviewing began in the Renal Clinic of the University of Missouri Medical Center. Here the first con-

tacts were people who had already had some direct exposure to the problems posed by kidney disease. Not all were suffering from renal failure. Patients ranged from those who had mild bouts with kidney infections to those who had experienced chronic renal failure and needed the help of an artificial kidney machine to sustain life. Families as well as patients were interviewed.

It was immediately evident that the degree of salience vis-a-vis renal failure indeed have a direct effect upon the respondent's ability to converse on the subject of kidney disease. This topic is not commonly discussed at dinner tables. However, even laymen with no direct contact had been exposed to the kidney machine through the mass media or personal conversations. Even those with the most sketchy knowledge had something to say, if only to chide the media for not making them more aware of such "vital" subjects.

The early interviews suggested new categories of people to contact. Interviews were conducted with blue- and white-collar laymen, with physicians, technicians, and nurses. Extensive interviewing was conducted in the St. Louis area with the help of the Metropolitan Kidney Foundation of St. Louis. Patients, their families and friends were interviewed, as well as medical and foundation personnel and those who actually sell the artificial kidney machine. The Kidney Foundation set up two panel discussions on the subject. Participants included representatives from all the previously mentioned groups. This provided an oppor-

tunity to observe differences in opinion, and also of witnessing an exchange of information quite beneficial to the study.

The Kidney Foundation provided several films and numerous examples of their efforts to spread information through the mass media. The films and printed information were informally copy-tested to gain some understanding of their effectiveness.

This testing consisted of asking the viewers of the film to talk about their experience in viewing the film. No effort to quantify the results was made, but it was found that viewers did not identify with the films because of their medically-oriented format.

Thirty to 35 depth interviews with people at each level of salience and expertise produced sufficient interview data.

Through the cooperation of the Renal Department of the University of Missouri Medical Center several days were spent observing not only the dialysis training program but also the daily contact of renal specialists with patients. The intent was to learn about the social problems involved as well as to absorb medical information. Of particular interest were the methods employed by the various medical teams in choosing which of their patients suffering from renal failure would make "suitable candidates for dialysis." Not every person in need is able to get the necessary treatment. Great differences exist in and out of the medical profession on the most humane and effective ways of dealing with this

problem. Although the problem is treated indirectly in the film, in the final analysis, the interviews indicated that it would be unwise to consider this issue deeply. The interviews indicated the best audience for the film would be a general one rather than a specialized interest group. There appeared a great need for a general film on dialysis that could reach a large number of lay people.

The Q-Sample

Construction of the testing instrument, a Q-sample, involved the selection of 40 of the more than 300 subjective statements gathered in the interviews and observation. The general intent was to design a simple instrument that could be used at all levels of expertise.

The Q-sample (n=40) is provided in the appendix. It is based on the following factorial design:

	Levels		
A. Topic category	financial (a)	mechanical aura (b)	transplantation (c)
	health in general (d)		
B. Subject category	personal (e)		societal (f)

(Design, 4 + 2 = 8; Replication 5: 8 X 5 = 40)

The frequency distribution for this Q-sample, used in the current study, was as follows:

Score	+4	+3	+2	+1	0	-1	-2	-3	-4
Frequency	3	4	4	5	8	5	4	4	3

Subjects

Forty subjects each performed a Q-sort to describe his or her attitude about kidney disease and its treatment.

Because we needed to know how attitudes toward the subject differed as a result of salience, it was decided to include in the sample an equal number of respondents with high and low salience, with the appropriate levels represented in between. Laymen (meaning those who had no direct link to chronic renal failure) numbered 20, and patients, their families, medical personnel and semi-medical (kidney foundation, social workers) comprised the other 20.

Treatment of Q-data

The data were analyzed by computer, (the QUANAL program on the University's IBM 360/65). Four factors resulted.

It is not considered necessary, in this brief account, to report these factor data in detail, except to say that the 40 subjects were found to be "on" the factors in the following numbers:

Factor I:	27 of the 40 subjects
Factor II:	4 subjects
Factor III:	3 subjects
Factor IV:	3 subjects

Thus, only 3 individuals are excluded from consideration, as being on none of the factors. Obviously Factor I dominates the data, but including more physicians would have increased the number of persons on Factor II: these proportions, in short, are not an indication of relative strength

of the factors in the public at large. They indicate, instead, centers of interest or saliency vis-a-vis kidney disease; how many people there may be of each factor in a random sample is a separate matter, of no direct concern at this point.

Section III: Analysis of Factors

Consensus Items

The consensus items are those statements on which all the respondents expressed relative agreement. These are particularly important to this project because in making the film we did not want to include any material that could alienate any substantial number of viewers. These items suggested broad themes to be used in the film.

The following is a list of the consensus items and the locations in the sort for each factor.

Statement	Factor Scores I	II	III	IV
(2) Sure, dialysis isn't a cure, but it enables people to have a worthwhile life in spite of their disease.	4	2	2	3
(30) We all ought to know more about this problem. It's too important for us to remain in the dark.	3	3	4	1*
(17) I don't think most people know what kidneys actually do for their bodies.	2	2	4	2
(16) The biggest problem with this dialysis is the money. It's too expensive.	1	1	2	2

Statements 2, 30 are clearly indicative of favorable feelings vis-a-vis dialysis; statement 17 suggests that there is room for learning more about kidney functions.

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*Included because in standard score terms the score was higher than this transformed score (+1) indicates.

Statement 16 is interesting in that high saliency is not given to the financial aspect of dialysis: it is widely assumed that the public has strong feelings about the costliness of dialysis, but this result appears to put matters in a different light. It is a problem, but not as salient as the need for more knowledge (17, 30).

At the negative end of the factors the following statements are consensus items:

Statement	Factor Scores I	II	III	IV
(25) The thought of donating an organ of my body is rather repulsive, even after I die.	-4	-4	-3	-3
(20) Kidney machines get a lot of publicity. There are much more deserving things to spend money on. What about cancer and heart disease?	-2	-1	-2	-2

These are both interesting: statement 25 is indicative of wide acceptance of organ donating. Statement 20 is a denial that money is "wasted" in dialysis--thought it is by no means as salient as the acceptance of organ donation (25).

These consensus data prompted several conclusions vis-a-vis the proposed documentary film:

People want to know more about dialysis, i.e. have in interest in it, irrespective of factor type.

They are not overly-involved about the cost of dialysis. (It was conjectured that this might have been a topic for immediate film treatment, to try to bring about a more favorable public attitude in this respect: the savings effected, by keeping a wage-earner active for many years, has been widely used as an argument to offset the high cost of dialysis. The Q-data suggests, instead, that

this is not a grave concern as far as the data goes.)

The donation of organs is apparently widely acceptable: it is not repulsive. Though not directly at issue here, the matter is of importance in that it makes the temporary use of a kidney machine fully tenable in the public view.

Factor I

The Personally Involved

Factor I is by far the largest factor with 27 of the 40 people significantly loaded on it. This factor is comprised of almost all the patients and their families, most of the non-physician medical personnel and several of the blue- and white-collar laymen. In short, most respondents to whom dialysis had high salience and who were not doctors, loaded highly on this factor.

The statements discriminating this factor most clearly are as follows:

Statement	Factor Scores I	II	III	IV
(15) I'd rather take the machine and all that goes with it than be dead.	4	2	-3	1
(10) If a sick man can be rehabilitated and sent back to work and his family, we are fools not to help him no matter what the price.	3	-2	2	3
(13) If my kidneys fail, at least I know there is a machine that can help me. Also I can get a transplant.	2	1	-1	-1
(28) Why should some patients be allowed to have kidney machines and others not? It's not fair to let some people die.	2	-2	1	-2

These all show highly personal involvement in the problem of dialysis. In each case it is the individual himself who is at issue--even when he is talking about "a sick man," or "patients."

At the negative end of the factor there are the following statements:

Statement	Factor Scores I	II	III	IV
(19) It's not a picnic being attached to a machine 2 or 3 times a week for the rest of your life. With that and all the other restrictions, how could anyone enjoy life?	-1	2	1	2
(32) More kidney machines are a waste of time and money. We need to put more effort into research and transplant so machines won't be necessary in the first place.	-2	3	1	0
(33) When I'm healthy, I don't want to think about sick people and death. The whole subject of kidney machines is depressing.	-3	-1	0	2

These again testify to the absorbing interest of these individuals in the kidney machine and dialysis. Statement 33 is especially significant: it is strongly denied (-3) that the thought of kidney machines is depressing. They are <u>not</u> a waste of time and money.

That is, the persons on Factor I identify highly with the problem of kidney disease and dialysis. They are personally involved (13, 33), not only dealing with the other person's problem, but also in considering what they would do if they were in the other man's place.

They think society has a responsibility to those who need dialysis (10, 32).

Factor I feels strongly that money should not be a factor when considering people for dialysis (10, 28, 32). They are advocating a stand strongly based pragmatics.

It is understandable that this group had no apparent aversion to transplantation. The high salience level here is

indicative that many of the people in this group have daily contact with kidney disease and dialysis.

The factor can perhaps be called "personally involved" --the topic matters greatly to them.

Factor II

Medical Pragmatism

Factor II is comprised of all three doctors who did the Q-sort, one person employed in an executive capacity in a medical program, and one blue-collar layman. It is logical to assume this factor would have had more people on it if more physicians had been included in the sample.

Statements highly discriminating for the factor are as follows:

Statement	Factor Scores I	II	III	IV
(40) I don't think I could donate a kidney while I'm alive. It's just too great a risk.	-2	4	2	-3
(29) If we can only save a few, then let's save the people who are most productive to society.	-1	3	-2	-4
(32) More kidney machines are a waste of time and money. We need to put more effort into research and transplants so machines won't be necessary in the first place.	-2	3	1	0
(10) If a sick man can be rehabilitated and sent back to work and his family, we are fools not to help him no matter what the price.	3	-2	2	3
(28) Why should some patients be allowed to have kidney machines and others not? It's not fair to let some people die.	2	-2	1	-2

Statement	Factor Scores I	II	III	IV
(26) Artificial kidney machines are just one more example of how doctors experiment on patients.	-2	-4	-2	-1

Though personally involved in the problem through their profession these persons see the subject in impersonal terms (32, 29). They do consider the problem of money (10),but they refuse to view the problem only in terms of personal feeling (28). They think in terms of what is most practical and rational for the sake of all society. They do not allow themselves to put the subject in personal and emotional terms (26, 28, 29).

One apparent discrepancy was noted in this factor on the subject of transplant; although they agreed that transplantation and organ donation are important to solving the problem, they balked at donating a kidney while they are alive (40). Still refusing to deal in personal terms.

A note written to me by one of the respondents typifies this factor. The respondent accused me of being a "liberal, starry-eyed youngster" from the "sheltered university atmosphere" who had had "little experience with the world of reality." He maintained that "no one dies of being poor" and "no one is allowed to die." The respondent had no way of knowing the statements in the sort were not the author's creation, or that they came from depth interviews, some conducted with members of his own medical staff. In addition,

the physician was upset by what seemed to him an unrealistic number of statements dealing with the "provocative social responsibility type questions." He thought we were acting too much on the basis of emotion rather than reasoning. One reason for his adverse response was that we designed the Q-sample on a level that could be understood by non-physicians. Q does not deal with the subject's expertise; it concerns itself with opinions and attitudes. Laymen do have opinions on these subjects.

Factor III

Mild Escapism

Factor III is composed of two laymen and a medical technician; it is the first of two non-identification factors. The small size of the factor is attributed to the selection of the sample. More laymen to which the subject has low salience, could logically strengthen this group.

The discriminating statements for the factor are as follows:

Statement	Factor Scores I	II	III	IV
(27) The complexity of the dialysis process scares me. That machine could become a monster.	-1	0	4	0
(4) Worrying about spending too much to keep a few people alive is just another example of the American preoccupation with money.	0	-2	3	-4
(8) Dialysis is just prolonging the inevitable.	-1	0	3	0

Statement	Factor Scores I	II	III	IV
(12) It is inhuman for a board of people to decide who will live and who will die. If the machine can keep someone alive, then the money can be found.	2	-3	3	-4
(31) A man should not die because he is poor.	3	3	0	4
(36) If I were seriously ill with kidney disease, I would sure find some way to get the money to pay for a machine.	3	2	-2	3
(29) If we can only save a few, then let's save the people who are most productive to society.	-1	3	-2	-4
(15) I'd rather take the machine and all that goes with it, than be dead.	4	2	-3	1
(39) The doctors who are transplanting organs are just using human beings to experiment.	-3	-3	-4	-1

This group is capable of dealing with the problem in human terms (12), but they fear it (8, 15, 36). They are not worried about spending (4), but they cannot see themselves in a financial struggle to stay alive, (36). They avoid that question (31).

Although this group would rather not consider the problem at all (29), they are capable of putting it on personal terms (27) and see the medical profession in terms of individuals rather than just an institution (39).

If there is an easy way out of dealing with kidney disease and dialysis this group would want it. They find it impossible to see themselves coping with the disease if it were their problem. No deep revulsion exists but they would

prefer to avoid any discomfort.

There can be no question, however, that they do not identify with the dialysis problem--it is "scaring," "prolonging the inevitable." So much is this so that they would apparently rather die than seek the means for dialysis (36).

One cannot help but feel, even so, that the story might be different if indeed they were to become directly involved in kidney disease.

Factor IV

The Easy Way Out

Factor IV is the second non-identification factor. Again in this case there were only three people on it. All three were laymen, in no way directly involved with kidney disease or dialysis.

The discriminating statements for the factor are as follows:

Statement	Factor Scores I	II	III	IV
(1) The idea of an artificial kidney machine is fascinating.	1	0	-1	4
(31) A man should not die because he is poor.	3	3	0	4
(24) The mass media have done a poor job in getting the story of dialysis and transplants out to the public.	0	0	0	3
(33) When I'm healthy, I don't want to think about sick people and death. The whole subject of kidney machines is depressing.	-3	-1	0	2
(6) There is no use in having these machines if they can help only a few people.	-3	-2	-2	1

Statement	Factor Scores I	II	III	IV
(39) The doctors who are transplanting organs are just using human beings to experiment.	-3	-3	-4	-1
(7) If a person gets cancer, there's very little he can do. At least with kidney disease they have a way to keep a person alive.	1	1	0	-2
(18) I would never take a dead person's kidney in my body. I'd rather die first.	-4	-4	-4	-2
(4) Worrying about spending too much to keep a few people alive is just another example of the American preoccupation with money.	0	-2	3	-4
(12) It is inhuman for a board of people to decide who will ive and who will die. If the machine can keep someone alive, then the money can be found.	2	-3	3	-4

There is evidence of non-identification here: One idea of a kidney machine is grossly exaggerated (1); the mass media are criticized (24); and clearly the topic is depressing (33). More than others, these persons carp at what is done (39, 7) and say they'd rather die (more so than the others) then have a transplant (18). By implication they are critical of the cost of dialysis (31, 4), feeling, however, that the money is unlikely to be found anyhow (12).

Conclusion

It is clear that the Q-sample distinguishes individuals for whom kidney dialysis matters (Factor I) in a personal, layman sense, or for whom it matters in medical, less personal terms (Factor II). Equally so, it distinguishes individuals

who apparently do not identify in either of the above ways with the kidney problem. Factor III's are capable of dealing with the topic, perhaps, and it would be of interest to determine whether a documentary such as is here projected could change their attitude. Factor IV appears to avoid involvement, to the point of distortion. It is a principle of communication that if one doesn't identify with a "message" system, one will distort its meaning[10] and this would seem to apply especially to Factor IV.

The four factors represent, for present purposes, four segments of the public, each with a schemata (Stephenson)[11] in relation to which they perceive the situation (in this case concerning dialysis).

Since the concern is with the lay rather than the professional (medical) public, in the sense that a documentary is needed with which non-expert individuals can identify, the concern has to be with Factors I, III, and IV. It should be easy, theory indicates, to produce a documentary with which persons of Factor I can identify. The real problem is to see what can be done with Factors III and IV.

The means now exist for prior Q-sorting, to indicate what a person's attitude is: after seeing a documentary, such as is here projected, it would be a simple matter to

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[10] Kernan, J.B. and Sommers, M.S. "Meaning, Value and the Theory of Promotion," Journal of Communication, XVII, 1967, pp. 109-135.

[11] Stephenson, W., Play Theory of Mass Communication, (Chicago: University of Chicago Press, 1967).

determine whether or not persons identify with the film, and therefore whether or not persons of types III and IV carry their resistances over into the film experience. It is to this end that the systematic research is directed.

Section IV: Making the Documentary

The Subject and Filming Conditions

In relation to the schemata for Factors I, III, and IV, a kidney patient was chosen for verite filming who (along with his family, wife and neighbors) could reasonably represent a lay person, neither poor nor rich, in some sense "ordinary" but attractive, so as to lend to ready identification possibilities.

Chuck is such a man, who appears in the documentary as a young assistant professor, with an attractive and devoted wife.

The life of these main characters has been portrayed as it really is; but from the very outset of the project the right to emphasize various aspects of the presentation has been retained to convey a specific impression toward achieving our end. This is not an admission of dishonesty. Everyone connected with the film agreed the editing process demanded the selection of some material and the rejection of a great deal more on the basis of the film's intent.

In the verite style the filming began by following Chuck through various situations in his daily life. Chuck was chosen because he had been on dialysis and was just completing his home training. Equipment problems necessitated setting up situations for filming. However, the events happened as they normally would, the participants acting and

saying whatever they wished.

Filming had begun at the end of the depth interview phase of the study. The interviews yielded enough information to decide what general areas should be captured on film. They provided enough guidance without limiting the selection of specific situations. Any aspect of Chuck's life that might lend itself well to a film about him was filmed.

All camera production of the film was undertaken by the author, who was aided by Gene Ferraro, a film editor, and a fellow graduate student, Roger Kahle.*

Because the film was designed to elicit a specific change in attitude no claim is made to categorize it as a pure documentary, (some believe the term documentary applies to films produced with less of a specific and determined persuasive content).

One limitation was the use of single system "lip-sync" shooting, which involved a camera that could not be used in anything but stationary settings. To combat this a great amount of silent film was exposed and wild-track sound recorded for eventual post-sync sound. In this manner, the attempt was made to have the camera in the participant-observer position influencing the subjects as little as possible. It should also be mentioned that the lighting requirements of color film add considerable problems to switching from one scene to another in the verite style.

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*The author expresses his thanks to these men for their invaluable contribution to the project.

(Until recently most verite films were shot in black and white, which requires less stringent lighting tolerance).

Although a plan existed as to how various situations might come together in a story about Chuck, an attempt was made to gather as much material as possible in order to leave the story element to the editing bench with the help of the Q data. The shooting ratio was estimated at about 8:1 (40 to 80:1 is not unusual for true verite), which left considerable choice in deciding which material best suited the story line and the indications of the research.

Three-fourths of the shooting was completed before the data had been fully analyzed; however, one-fourth of the shooting stock was saved to shoot any situations or retakes the data might suggest. For instance, it was expected the data might indicate an aversion for needles used in dialysis (which it did) so when the main characters were later interviewed, they were asked about needles. The line between the pre-data verite shooting and the post-data more-specific shooting is analagous to the difference in depth interviews and administering of a Q-sort. The second was done on the basis of the first, but each stage allowed the subject flexibility on the basis of subjectivity. The sort was more focused for the purpose of quantification, the post-data shooting more specific for the sake of the film's continuity. Even in the final shooting the policy of no script was adhered to.

Editing the Film

The film editors had the benefit and guidance of the factor analysis. It is difficult to say exactly where cuts were made on the basis of specific data; most likely very few were. More likely the information provided general guidelines.

In general, the film follows a structure leading through one particular case, Chuck, to a reinforcement of several similar cases, to a more broad look at the general aspects of dealing with the problem (the Kidney Foundation sequence), then back to the particular. This was an attempt to place Chuck in some kind of perspective, rather than present his case as an isolated statement, the credibility of which is left entirely up to chance. On a less significant scale an attempt was made to place the concepts of dialysis and transplantation in some proper perspective. Although Chuck is alive only because of dialysis, the viewer was given considerable indication that dialysis is not an end in itself medically.

The analysis of the factors in the study indicated there would already be a sizable group of people that could identify with the topic of the film (Factor I). This group is basically sympathetic to the problem of ill-health, kidney disease in particular; they can identify with the sick and have no trouble fitting this situation into their existing schemata. It was the intention of the film-maker to exclude any information or situations that might alienate this segment of the audience. In general, the intention was to

closely portray reality, keeping Factor I within the fold.

It was not the intention to produce a film for a medical audience. However, the value of maintaining the support of the medical community for the film was realized and steps were taken to avoid any negative reaction on the part of Factor II types (as opposed to structuring the film in an outright appeal to this group which would amount to one of the common errors cited by Stephenson and Hunt). Steps were taken to assure the medical accuracy of all the facts portrayed in the film. The subject matter and the general approach necessitated keeping the settings of the film outside the confines of the hospital; emphasis was placed on dealing with the serious medical condition in the personal atmosphere of the patient's home. Factor II types are more inclined to see the problem in terms of pragmatics and society; this is all right for the doctor who must consider medical problems on that level, but laymen are more inclined to see the problem through the eyes of the patient (they identify because most of them have been patients), a much more emotional and personal viewpoint.

Factors III and IV expressed negative attitudes toward the subject of dialysis and kidney disease. These are people the film-maker wanted to reach. To do otherwise, would be as Stephenson puts it, "Carrying coals to Newcastle" (a waste of time). There is little point in designing a message appealing only to those already in sympathy with the problem (Factor I).

The appeal to the two groups represented by Factors

III and IV was structured by stressing the normality rather than the abnormality of the main character. He was shown in the dialysis situation, but it is mostly in the home setting where Chuck and his wife rely on their personal relationship to deal with the affliction. The positive elements of his human condition were emphasized.

Chuck and Beverly were shown to be self-reliant; each has a job and each enjoys the more routine aspects of his or her life. Chuck's opening line in the film makes reference to the 150 hours a week he is not on dialysis. This time he makes important; so does the film.

Information in the film was brought out in the course of conversation. Admittedly, the viewer is sometimes left to wonder about minor details, but this part of the involvement process. By making Chuck less specific and more average, greater involvement and identification is enhanced. Since he does the things most men his age do, Factor III and IV might see Chuck as they do their neighbors next door.

The absence of a narrator was an additional attempt at helping the viewer become involved in the film. The editing task of getting the characters to tell their own story involved occasional compromises in terms of film content, but the sacrifice was made in order to maintain the technique. The absence of a narrator could be considered a facilitator, helping to transport the viewer into the film.

The "immediate experience," the reaction of the viewer while he is being subjected to the film was kept in mind.

throughout. Personal involvement in the form of subjective enjoyment will help him merge his own identify with the drama. If the appeal to the types indicated by the Q-data is successful some change in attitude may result. The main concern was the total impression of the film upon the viewer. As stated earlier, the purpose is simple, to leave the audience with the whole impression rather than several fragmented messages.

The Film Outline

The opening of the film is designed mainly to get the attention and arouse the curiosity of the viewer. The couple is seen in a canoe, a pastime most people can identify with; these scenes are cut against the setting up of the kidney machine. The intention is to contrast the normal against the abnormal, both sets of hands doing entirely different tasks. Some may argue the scenes are wasted because the viewer is left to wonder what is happening; however, at the very least, the sequence is lively, interesting and unusual for medical films of this type. All four factor groups should have no trouble identifying with this segment of the film.

The first live-on scene involving the main characters shows the setting for home dialysis. Admittedly, this scene is stark in its reality, dwelling on the negative aspects of the problem. But, the situation does concentrate on the relationship of the man and wife; they appear relaxed and in a routine process (although for the audience this medical pro-

cedure outside the hospital is anything but routine). The voice track reveals calm conversation between the two as Beverly inserts the needle in Chuck's arm. Two reasons justify the existence of this scene; a total disregard for the negative aspects of this problem would detract from the credibility of the film; and, the impression left by the characters should have some effect on the aversions expressed by Factors III and IV. Although this is the worst aspect of dialysis, the attempt here was to make it palatable.

The first interview with Chuck involves an extended tight close-up of him talking, then a gradual pull-back to reveal he is being dialyzed while he is talking. Again the intention is to show the non-involved that Chuck is in no pain and is quite lucid while he is "on the machine." Subsequent scenes reveal information about the dialysis process always showing the husband and wife going through the experience together.

The dinner table scene which follows shows Chuck can engage in social activities despite the restrictive diet of the dialysis patient. More information is brought out in the conversation with the host's family revealing the curiosity of the participants about Chuck's condition. Factor III and IV types will experience an open family discussion of Chuck's problem with no revulsion and a good deal of humor on the part of Chuck and Beverly.

A montage of activity scenes follow showing what Chuck's life is like when he is not on the machine. In the first voice-overlay Chuck made reference to the 150 hours each

week he is not on the machine; this part of the film emphasizes that 150 hours. The image of Chuck as the "guy next door" is strengthened here for the purpose of gaining Factor III and IV identification. Obviously, the walking scenes, set to music, dwell on the relationship of husband and wife, whose mutual love and respect have made it possible to cope with the situation.

The sequence revealing the situations of two additional patients stresses the fact that Chuck is not the only successfully treated patient. In the conversational trading of situations, the discussion emphasizes the bond between each couple and each's desire to have the world understand the problem. The young woman playing with her daughter and the trucking executive hard at work are appeals to the Factor III and IV types playing on the normality and activeness of the patients. The woman, Carol, is an example of the logical conclusion of the dialysis treatment, a successful kidney transplant.

Chuck next gives a voice-over introduction to the kidney foundation sequence which is not only designed to give some information about this organization, but also to provide some immediate means of viewer participation. If the viewer wishes to become actively involved, the foundation provides a logical outlet. There is no hard-sell pitch for money or services. The emphasis is on the kidney foundation's efforts to help people with kidney problems and to get the word out to the public.

Finally, Chuck is returned to a tranquil picnic setting where he is discussing his situation and his outlook on the future. The pace of the scene is again designed to appeal to Factor III and IV by indicating that the character has more than coped with his problem and because of that, he does have a future.

The effort has been made to help the escapist groups identify with and become involved despite the afflictions of the main character. They have seen him do many of the things normal people do; his life is not shown as a desperate losing struggle for survival. The normality is made more important than the abnormality.

Section V: Testing the Film for Communication Effectiveness

The logical progression in this study would be to copy test the film. Such a test would yield specific implications for this particular film, but perhaps more important, give some support for the general approach to film-making, that this study represents.

The actual testing of the film's effectiveness is left for subsequent efforts; suggestions for the testing methods to be employed are nevertheless offered.

Several ways of testing films have already been perfected by Stephenson[12] and documented in the "Vergent Report" of CRU. Miss Hunt[13] also made use of these methods in her study.

Most widely used by Stephenson is the copy-testing of films by asking the viewers to talk about their experiences in viewing the film. On the basis of these subjective accounts a Q universe is established. From the universe a Q sample is drawn and utilized in Q-sorts to allow the viewers to recount their experiences by modeling their subjectivity. The resulting factors represent the existing schemata. As is the case with the pre-film testing, not all factors indicate identification with the subject of the film. Information on those

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[12] Stephenson, W., "Vergent Report," ut supra.

[13] Hunt, K., "A Comparison of Two Medical Films," ut supra.

who do identify help the researcher to determine with respect to what aspects of the film the identification actually occurs.

Stephenson utilized this method in testing Smoke Screen, a commercially produced anti-smoking film.[14] The results indicated the built-in shock effect of the film communicated to the non-smoker, but had little or no effect on the smoker.

A second method of testing the film, employed by Miss Hunt, is a comparison of two films of similar subjects. Q is again used in establishing the various schemata to isolate indications of viewer identification. Miss Hunt utilized this method to compare two films, Smithville, produced by the Social Security Administration and Marcia: It's Wonderful produced by CRU of the Missouri Regional Medical Program. The results indicated that viewers were much more inclined to identify with the CRU film and in most cases considered the other film merely informative.[15]

A third and less practical method of testing the film would be to produce an additional version employed by the same verite footage but a different structure. Comparisons could be made, again using Q to test the effectiveness of utilizing the material in different ways.

The main intent in copy-testing the final production is to determine if a significant segment of the viewers

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[14] Stephenson, op.cit, p. 9.

[15] Hunt, op.cit.

has been able to deal with the film's content in the aforementioned subjective way; if the material has been effectively presented in the existing schemata, viewer identification with the themes in the film is indicated by the tests. The most important element in all copy testing, regardless of the specific method employed is allowing the viewer to express his feelings about the experience in his own frame of reference, his own subjectivity. The basis here, is an assumption that "values, beliefs, and opinions matter as much as, or more than, facts in communication."[16]

The materials are now available, therefore, consisting of the 24-minute documentary film, "Dialysis: A Man, A Life," and the 40-item Q-sample, on which to pursue orderly study of film-making. Whether individuals, pre-tested by the Q-sample and found to be on non-identification factors such as Factors III and IV, in fact identify positively with the film as shown by copy-testing it, remains the main objective of one's study. It is to be anticipated that a study directed to this end will be undertaken in due course.

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[16]Stephenson, ibid., p. 8.

Conclusion

The film, "Dialysis: A Man, A Life" has been produced, using some of the available knowledge in film communication and the specific information indicated by research study. If it is unsuccessful, perhaps this documentation may save others the same mistakes. If it succeeds, a small plank has been set in the bridge from research to creativity.

Filming, editing, and producing a film is of course an exacting and costly matter. Hitherto producers seem to have had most to say about film-making, though film critics have also had their say at length. The present purpose has been to make a contribution to the process of studying films systematically, so as to bring some elements of proof and disproof into the film-making art. Methods now exist for testing how far, and in what manner, viewers identify with a film, in terms of Q-sorts for their "immediate experience." Experimental situations can now be set up to test how far films can in fact achieve rather more than merely "bring coals to Newcastle," that is, merely interest those already involved in the problems or situations covered by a film. It remains to be shown whether the present film can achieve this, by involving the medical critics (Factor II), and the non-identifiers of factors such as III and IV sufficiently in its story, to lead them to identify with it, and thus to begin a process of change in attitude, the primary object of the film.

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APPENDIX I

Q-Sort Statements

1. The idea of an artificial kidney machine is fascinating.

2. Sure, dialysis isn't a cure, but it enables people to have a worthwhile life in spite of their disease.

3. I don't think there could be any greater gift than to give life to another person by donating my own kidneys for transplant. My kidneys certainly won't do me any good after I'm dead.

4. Worrying about spending too much to keep a few people alive is just another example of the American preoccupation with money.

5. I don't like to talk about urine. It makes me feel dirty. Besides, I don't like the word.

6. There is no use in having these machines if they can help only a few people.

7. If a person gets cancer there's very little he can do. At least with kidney disease they have a way to keep a person alive.

8. Dialysis is just prolonging the inevitable.

9. Legislators ought to be alloting more money for dialysis programs. That's what we pay taxes for.

10. If a sick man can be rehabilitated and sent back to work and his family, we are fools not to help him no matter what the price.

11. Prolonging life with no hope for perfect health is simply foolish.

12. It is inhuman for a board of people to decide who will live and who will die. If the machine can keep someone alive, then the money can be found.

13. If my kidneys ever fail, at least I know there is a machine that can help me. Also I can get a transplant.

14. If I were that dependent on a machine, I would probably appreciate much more of the other things in life. It would be a hard fight, though, to keep the machine from ruling my life.

15. I'd rather take the machine and all that goes with it, than be dead.

16. The biggest problem with this dialysis is the money. It's too expensive.

17. I don't think most people know what kidneys actually do for their bodies.

18. I would never take a dead person's kidney in my body. I'd rather die first.

19. It's no picnic being attached to a machine 2 or 3 times a week for the rest of your life. With that and all the other restrictions, how could anyone enjoy life?

20. Kidney machines get a lot of publicity. There are much more deserving things to spend money on. What about cancer and heart disease?

21. I think it would be harder for a patient's family to adjust to the kidney machine that it would be for the patient, himself.

22. Selecting people for dialysis should be like a court of law. A man is innocent (has the right to live) until the court (the doctors) can prove otherwise.

23. Kidney transplants are glamorous.

24. The mass media have done a poor job in getting the story of dialysis and transplants out to the public.

25. The thought of donating an organ of my body is rather repulsive, even after I die.

26. Artificial kidney machines are just one more example of how doctors experiment on patients.

27. The complexity of the dialysis process scares me. That machine could become a monster.

28. Why should some patients be allowed to have kidney machines and others not? It's not fair to let some people die.

29. If we can only save a few, then let's save the people who are most productive to society.

30. We all ought to know more about this problem. It's too important for us to remain in the dark.

31. A man should not die because he is poor.

32. More kidney machines are a waste of time and money. We need to put more effort into research and transplants so machines won't be necessary in the first place.

33. When I'm healthy, I don't want to think about sick people and death. The whole subject of kidney machines is depressing.

34. Kidney machines make me nervous--too much blood.

35. If a dying kidney patient won't be able to afford a kidney machine, his doctor shouldn't tell him about them.

36. If I were seriously ill with kidney disease, I would sure find some way to get the money to pay for a machine.

37. As long as a person can be active and feel good, he is just as healthy as anyone else.

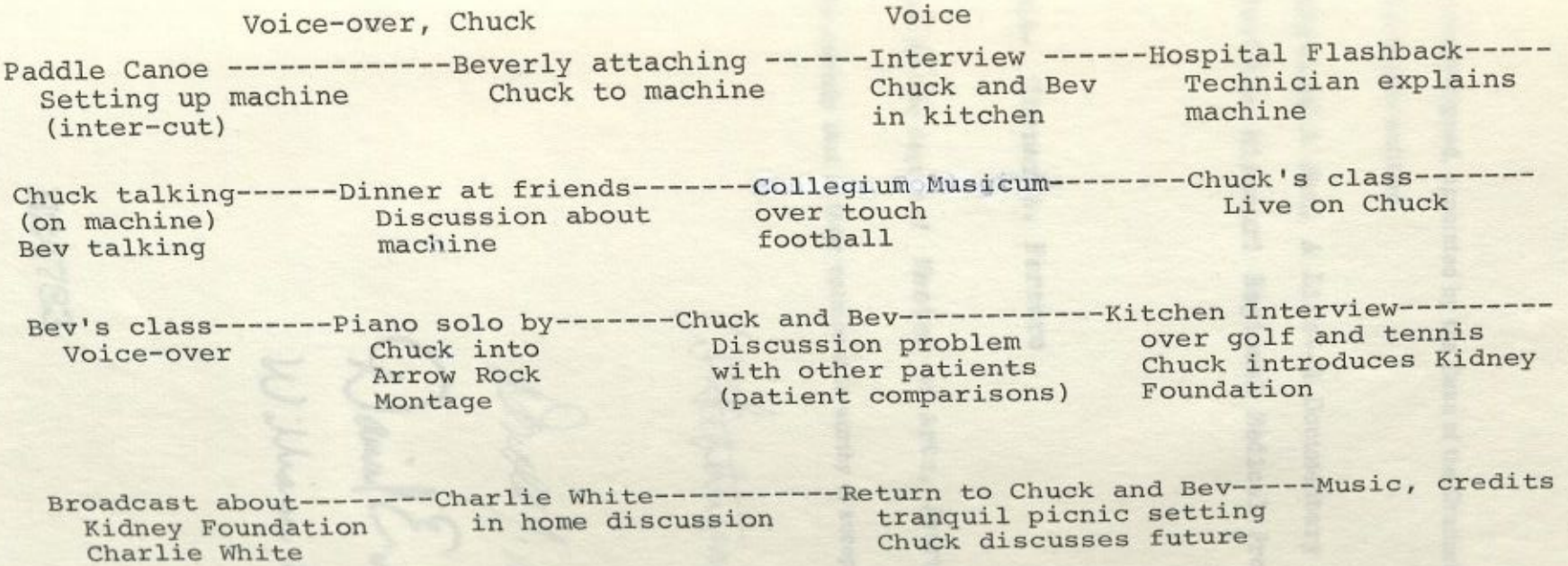
38. A doctor has no right to play God and decide who gets to live on dialysis and who goes home to die.

39. The doctors who are transplanting organs are just using human beings to experiment.

40. I don't think I could donate a kidney while I'm alive. It's just too great a risk.

APPENDIX II

Film Structure Chart



The undersigned, appointed by the Dean of the Graduate Faculty, have examined a thesis entitled

Dialysis: A Man, A Life--A Documentary Film
Produced for the Missouri Regional Medical Program

presented by Thomas A. Ferraro

a candidate for the degree of Master of Arts, Journalism

and hereby certify that in their opinion it is worthy of acceptance.

Wm Hathenson

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