CULTURAL INDICATORS

Trends in television content and viewer conceptions of social reality

Proposal for the renewal of a research grant

A. Introduction

The Cultural Indicators project is the major long-range comprehensive and cumulative basic research investigating the mental health and behavioral consequences of television viewing. It is the only study relating trends in TV content to viewer conceptions of social reality. While recently our research gained significant scholarly recognition* and popular visibility,** much of the attention was directed at a few applications and implications (such as the Violence Index and Profile) rather than to the basic effort. Also, the attention was more anticipatory than fully earned. Some aspects of our methodology are well established but others are still exploratory and in need of further development. Our findings are striking and highly suggestive of systematic TV content and viewer response patterns, but they are still preliminary and illustrative.

In the next period, we propose to (1) continue the program analysis and sampling experiment to find the optimum and most economical time base for program analysis, (2) extend the basic research effort to a variety of health and behavior related indicators, (3) continue the children's longitudinal panel study and the adult viewer analysis, and (4) develop the methodology and procedures necessary for the inclusion of news and commercials in the analysis of the "world" of television programming.

1. Objective

Homo Sapiens becomes a particular kind of human being through his use of symbols. Social regularities in human behavior canot be understood in isolation from cultural regularities in the symbolic environment. And when the symbolic environment itself is changing, the quality of social health and behavior can best be assessed if we know which way the cultural tides flow. The purpose of Cultural Indicators is to provide such information.

This study continues basic research and proposes some substantive and methodological extensions of an ongoing project on indicators of the relationships between pervasive cultural trends represented by network television and popular conceptions of reality in critical areas of health, behavior, and policy. The project builds on the results of prior support by foundations, commissions, and agencies and responds to needs for priority research expressed in recent government and foundation reports.

^{*}See e.g. George Comstock,

^{**}E.g. The Washington Post, April 2, 1976; April 26, 1976; May 2, 1976; the New York Times May 16, 1976; Broadcasting April 5, 1976; and earlier accounts in Newsweek, wire service, and syndicated stories.

The basic assumption underlying this study is that television drama is in the mainstream -- or is the mainstream -- of the symbolic environment cultivating common conceptions of life, society, and the world. No member of society is unaffected by its dominant cultural trends. However, living deep in the mainstream, being a heavy consumer of its images and messages, mean more intensive enculturation and tighter integration of the myths and rituals of the symbolic world into one's view of how the real world works than does living a more insulated life or in a more independent or diversified cultural context. Therefore, while all Americans are influenced by the persistent symbolic structures of the cultural mainstream, heavy viewers of television are more likely to conceive of reality as they experience it in television drama than are light viewers.

Our studies to date provide evidence of the plausibility of these assumptions and the feasibility of definitive research along these lines. comprehensive and cumulative analysis of the symbolic world of television is related to images and conceptions of social reality held by children and adults in such areas of knowledge as geography, demography, personal and group stereotyping; age, sex, ethnic, etc., occupations, power, and other role expectations; and issues such as crime and victimization, family life, aging, minority group relations, and so on. The cultivation hypothesis is of course most testable in those aspects of social "reality" in which the world of television drama diverge from those of the real world. The pattern of findings is remarkably consistent. It shows that the world of television drama does cultivate conceptions of life and society even (or especially) when the real-life facts (or overt values) hold otherwise. The findings also indicate that those most integrated into the symbolic mainstream (the heavy consumers of its products are the most likely to use its fictional structure to define the real world of people, places, and values.

These findings represent preliminary but clear-cut demonstrations of significant media effects upon imagery and knowledge of critical social import. The effects are on a more basic level than attitudes, opinions, and campaigns of information or persuasion (which is where most previous research was conducted). They go to the very definitions and assumptions of the facts of life and society cultivated by pervasive, massive, and repetitive symbolic representations.

The research to date was based on solid-week fall (and more recently also spring) network dramatic program samples, and the corresponding surveys of adult viewer samples and children's panels. During the next period we propose to extend the sampling experiment (on the basis of the results of fall and spring sample comparisons, reported below) and to broaden the program analysis to include news and commercials, as well as to continue the longitudinal children's and adult viewer surveys. At the same time, the development of multidimensional indicators of television content and effects will encompass a variety of health and behavior related issues and concepts.

The proposed study will maintain as well as expand and deepen the mapping of the symbolic world and the tracing of its effects with respect to both general conceptions of social reality and a set of critical public issues such as education, health, violence, public authority, law observance, and domestic and global group relationships. At the conclusion of the proposed project, the theory, methodology, and presentational techniques of a set of multidimensional comparative indicators will be available for the continuing mapping and interpretation of the image and knowledge cultivation characteristics of American television.

2. Background

The research began with the investigation of trends in network television drama in 1967-68 for the National Commission on the Causes and Prevention of Violence () and continued through 1972 under the sponsorship of the Surgeon General's Scientific Advisory Committee on Television and Social Behavior (). The study was broadly conceived from the beginning and both reports showed the role and symbolic functions, as well as the extent, of violence in the world of television drama. A conference of research consultants to the National Institute of Mental Health in the spring of 1972 recommended that the research be further broadened to take into account social relationships and viewer conceptions. Implementing that recommendation, we issued the Violence Profile (fifth in our series of reports), including violence-victim ratios and eventually viewer responses. The then Secretary of Health, Education, and Welfare Caspar W. Weinberger reported to Senator John O. Pastore in the fall of 1973 that our research was "broadened to encompass a number of additional dimensions and linked with viewers' perceptions of violence and its effects, as recommended by NIMH consultants and as incorporated by Dr. Gerbner in his renewal research" ().

The "renewal research" to which Secretary Weinberger referred is our present project, Cultural Indicators. Several additional events influenced the further fate and development of the research. Senator Pastore and the late Chairman Torbert Macdonald of the House Communications Subcommittee continued to take active interest in it. The research director of the report to the Surgeon General, Eli A. Rubinstein, continued to press for follow-up research (). Douglass Cater and Stephen Strickland wrote a book on the report and argued for "ongoing research capable of undergirding large public policy investigations" (). And, finally, a committee of the Social Science Research Council especially formed and funded by NIMH to study the Violence Profile recommended continued use and further developments (). Although the study of violence is a continuing aspect of the research, the project is developing indicators of other themes, roles, and relationships significant for social science and policy.

The pattern of findings that is beginning to emerge confirms our belief that television is essentially different from other media and that research on television requires a new approach. In an article attached as Appendix X, we sketch the outlines of a critique of modes of research derived from experience with other media and advance an approach we find more appropriate to the special characteristics, features, and functions of television.

3. Rationale

Imagine a hermit who lives in a room which is linked with the outside world via a television set that can only receive dramatic programs. This person's knowledge of the world would be built exclusively out of the images and "facts" which he could glean from on an unending diet of symbolic events.

What would exist in this man's world? Obviously, only those persons, objects, places and events that are depicted on television. What would seem important in this world? Clearly, the importance of the various elements of his "reality" would be determined by the frequency of their appearance and by the centrality of their roles. Similarly, the ways in which the various constituents of the television world are portrayed and organized would be the only source of his knowledge of their value and of their inter-relation-ships.

While few are likely to find themselves solely dependent upon television for their knowledge of the world, it seems worth asking how much our view of the world actually resembles that of our hypothetical hermit. And, possibly more importantly, how similar will a child's world be, given relatively little exposure to the complexities of the "real" world and a steady and generally non-selective diet of exposure to the world of television?

All art is based on conventions that govern the selection and organization of elements. The skill of the individual artist is only visible against the background of the stylistic conventions of his period and medium.* The dominant stylistic convention of Western narrative art -- novels, plays, film, TV drama -- is that of representational realism.** The premise of realism as a stylistic convention even of fantasy materials such as cartoons has important implications. It makes the audience respond as if the artist's choices were governed not by the conventions of art but by the facts of life. However stereotyped the plots are, we assume that they take place against a backdrop of the real world -- the details must naturalistic or we feel that something is wrong. Characters must behave as people would in most situations. The conventions of character development are those of Sunday-supplement psychology. When the impossible does occur it will often be treated as if it, too, were part of a natural order in which nuns could fly and animals speak. Nothing impeaches the basic "reality" of the world of fictional entertainment.

This picture of the conventions of realism may not fit the facts of "high culture" or avant-garde art in our time, but it is certainly appropriate for the world of television. If the premise of realism in television drama seems a bit thin for some adult viewers, it is certainly plausible for most children who are not as skilled at discerning the evidence of "poetic" license. Recent research has shown the extent to which children will respond to a story shown

^{*}Larry Gross, "Art as the Communication of Competence," <u>Social Science</u> <u>Information</u>, 12(5), 1973, pp. 115-141.

^{**}The pilot study found 96 percent of all television plays (other than cartoons) to be realistic in style.

them in the form of photographic slides by stating that it was "real" -that it really happened.* Greenberg's study of "Children's Reactions to
TV Blacks" found the effects of TV exposure generally even more marked and
judged more "real to life" than that of personal encounter.**

Television drama, operating on this premise of realistic depiction, offers the viewer an apparently rich array of windows through which he can glimpse apparently diverse images and events. But the diversity is only in the shape of the window and the angle of the glimpse — the basic topography of the TV world is constant. It is also highly informative. That is, it offers to the viewer a continuous stream of "facts" and impressions about the ways of the world, the constancies and vagaries of "human nature," and the consequences of actions. The premise of realism is a Trojan horse which carries within it a highly selective and purposeful image of the facts of life.

What is this image of the world, what are the lessons of this hidden curriculum, and are they indeed learned by the unsuspecting pupils of television? These are the questions which we are addressing in an attempt to analyze the critical symbolic messages of television and to trace their impact on the beliefs and values of its audiences.

^{*}Sol Worth and Larry Gross, "Symbolic Strategies," <u>Journal of</u> Communication, 1974, 24:4, pp. 27-39.

^{**}Bradley S. Greenberg, "Children's Reactions to TV Blacks," Journalism Quarterly, 50:5-14, Spring, 1972.

b. Summary

The nature of the world portrayed in prime time television drama and its effects in cultivating conceptions of social reality were the subjects of this project. Reliable methods for the analysis of dramatic message systems were applied and a cumulative data archive has been compiled and refined. Questionnaire surveys (incorporating semi-projective test items) were developed and administered to quota and probability samples of adults; secondary analyses have been conducted on survey data gathered by other researchers; and a longitudinal study of school children is in progress.

Nine years accumulation of analytical material now comprises the broadened data base for the proposed study. The results have featured stylistic, demographic, occupational, sex-role linked, and dramatic (mostly crime and violence) aspects of the television world, and pointed up the importance of a detailed analysis of the facts of the "message" for undertaking a study of its possible effects.

c. Detailed report

We undertook (1) to develop methodologies for the reliable observation of "facts of life" of the world of television drama, and (2) to create tools and procedures for the assessment of the consequences of "living" in that fictional world. We call the first type of research message system analysis and the second cultivation analysis. In testing the cultivating effects of the "facts of life" in the world of television, we relied primarily on those "facts" that diverge from the "real world" as represented in factual statistics and possibly news accounts.

Message system analysis. Network dramatic programs transmitted in evening prime time (8 p.m.-11 p.m.) and network children's dramatic programs transmitted weekend mornings (Saturday and Sunday between 8 a.m. and 2 p.m.) comprise the analytic source material. Since 1967 the annual sample has consisted of videotaped programs broadcast in one week during the fall television "season" and, since 1975, programs broadcast during a week in the spring (the "second season").

The message system analysis is performed by a group of trained coderpairs. Training consists of viewing and using the recording instrument to code ten programs selected from the tape archive. A diagnostic procedure is utilized to select the coder-pairs who will code the annual sample.

The recording instrument used in the message analysis has four units of analysis: (1) the program as a whole, (2) each specific violent action (if any) in the program, (3) each dramatic character (major and minor) appearing in the program and (4) close personal relationships between characters. The reliability of each item in the recording instrument is

measured by the application of appropriate formulae for the assessment of the reliability of coder observations (see methods of procedure, below).

The eleven one-week samples analyzed during the nine years of this research have yielded 1135 programs, 3231 major characters and 5769 violent actions. Data for each of these units of analysis has been systematically archived and subjected to several specialized analyses.* However, only a few highlights of these analyses can be reported here.

Thematic trends appear to be remarkably consistent despite apparent fluctuations of style and the popularity of different types of programs. Each year about one third of the sample is cartoons, a little less than one tenth is feature films, while television plays make up the remainder of the programs. Daytime (weekend) programs make up 40 percent of the sample. Action programs (crimes, westerns, and action-adventures) comprise more than one-half of all programming. One-third of each sample is new programs and two-thirds are programs continued from the previous year. Each network (ABC, CBS, NBC) has about the same number of programs each year.

A special comparison of the spring and fall samples (fall 1974 and spring 1975, fall 1975 and spring 1976) did not yield substantial programming differences. In fact, programming content and context were very stable across these four samples. The one major difference was that the two spring samples contained fewer new programs (15 percent) than the two fall samples (41 percent).

The world of television drama is predominantly domestic, urban, contemporary and middle class. More than half of all cartoon programs are comis in tone, while more than two-fifths of general programs are comic. Extreme poverty and extreme wealth are rarely portrayed in television drama. More cartoon programs than general programs take place outside the United States and in the future.

Violence is an important aspect of network television dramatic programming. Since 1967 about 8 out of 10 programs have contained some violence and the overall rate of violent actions per program is 5.1 and the rate per hour of programming is 7.4. Violence is an especially important part of cartoon programming where 94 percent of all cartoons contain some violence, the rate per program is 6.1, and the rate per hour of cartoon programming is 19.2. In the current television season (1975-1976) there has been some decline in the amount of violence aired during the "family hour" (8 p.m. to 9 p.m. EST). However, the "family hour" decline has been matched by a sharp increase in violence during children's (weekend daytime) programming and by an even larger rise in violence after 9 p.m. EST.

The major characters who populate the world of television drama are predominantly male (3 out of 4), not married and in the prime of life. A little

For example:

^{*}George Gerbner, Larry Gross, Michael F. Eleey, Suzanne Fox, Marilyn Jackson-Beeck, and Nancy Signorielli, Violence Profile No. 7. The Annenberg School of Communications, University of Pennsylvania, April 1976 see Appendix ().

Nancy Signorielli Tedesco, "Man and Women in Television Drama: The Use of Multivariate Techniques for Isolating Dimensions of Characterization." A dissertation in Communications, University of Pennsylvania, 1975.

more than half of the characters are employed, usually as professionals. Business, government, entertainment, law enforcement, and crime are the major occupations. More than 40 percent of all major characters commit some violence while over half of these characters are victims. More than 6 out of 10 characters are involved in some type of violence. Killers make up about 8 percent of the character population while 4 percent of all major characters are killed.

There are even fewer female major characters (17 percent) in cartoons. Cartoon characters also tend to be more violent (55 percent commit violence and 74 percent are victimized). More than 8 out of 10 major characters in cartoons are involved in some type of violence. However, fewer cartoon characters)3 percent) are involved in killing.

Children and old people are hard to find in television drama. Children make up about 10 percent of all major characters while only 3.5 percent of major characters are classified as elderly. Women are more likely to be portrayed as young adults, but they generally age earlier and faster than men. Old women are more likely to be killed or be the victims of violence.

Social power in television drama is demonstrated in the portrayal of violence. The most elementary — and telling — relationship involved in is that of violent and victim.* The pattern of those who inflict and those who suffer violence (or both) provides a calculus of life's chances for different groups of people in the world of television drama.

The summary Table on the next page gives overall scores of involvement and what we call Risk Ratios. The character scores (CS) is the roles component of the Violence Index; it is the percent of all characters involved in any violence plus the percent involved in any killing. The violent-victim and killer-killed (risk) ratios are obtained by dividing violents and victims, or killers and killed within each group. The plus sign means more violents or killers in the group; the minus sign means more victims.

The totals from 1967-1975 show 1.19 male and 1.32 female victims for every male and female. Even more striking are the differential risk of fatal victimization. There were nearly two male killers for every male killed; however, for every female killer one woman was killed.

The Table also shows the differential risks of involvement and victimization for other groups, projecting assumptions about social and power relations. Old men, married men, lower class, foreign, and nonwhite males were most likely to get killed rather than to inflict lethal injury. "Good guys" were most likely to be the killers.

Among females, more vulnerable than men in most categories, both young and old women as well as unmarried, lower class, foreign, and nonwhite women bore especially heavy burdens of relative victimization. Old, poor, and black women were shown only as killed and never as killers. Interestingly,

^{*}This analysis is based upon data from the 9 fall samples (see Violence Profile No. 7, Appendix .

"good" women, unlike "good" men, had no lethal power, but "bad" women were even more lethal than "bad" men.

The pattern of relative victimization is remarkably stable from year to year. It demonstrates an invidious (but socially functional) sense of risk and power.

The next question is how the social symbolic context of the television world affects the prevailing cultural climate and cultivates viewers' conceptions of the facts of life. For example, we do not yet know whether the victimization patterns presented above cultivate a corresponding hierarchy of fear and aggression. However, research from the cultivation analysis part of this project has supplied evidence to suggest that television viewing cultivates a general sense of danger and mistrust.

CULTIVATION ANALYSIS

Our stategy for the investigation of television effects upon specific facts and conceptions of social reality begins with the analysis of the world of television drama. We then compare the facts of life on television with those available for parallel aspects of the "real world." To give a relatively simple example, most criminal cases involving violence are decided by judges. On television, however, courtroom trials are an important dramatic arena, and guilt or innocence are usually determined by juries.

Our next step is to ascertain what respondents -- adults and children, viewers and non-viewers -- think is the true state of affairs. By matching the judgments or our respondents with the data derived from our analysis of television drama and from real-life sources we can build a composite picture of the relationships between these three images of the world. In many cases it is possible to trace a line extending between the image of the world via television and that image which presumably reflects the true world of fact and then place our respondents at various points along this dimension. In such cases we may be able to see how close our viewers come to seeing the world as would our hypothetical hermit in solitary confinement with a television set.

The primary tool we have been developing for this purpose, in addition to the portrait sets discussed above, is a semi-projective questionnaire. This instrument incorporates two main types of items. The first type consists of forced error choice items, similar to those used by Hammond,* which require the respondent to select one of two or more answers to a factual question. All of the answers are incorrect, but they are chosen so as to reflect either the bias that is characteristic of television drama, or to represent a bias in a direction opposite to that which would be found on television. In other words, these items require the respondent to choose answers which may reflect either a "television" or a "non-television" (which often means "real world")

^{*}K. R. Hammond, "Measuring Attitudes by Error Choice: An Indirect Method," Journal of Abnormal and Social Psychology, 43:38-48, 1948.

bias. The second type of item is designed for the same purpose but asks opinion, as opposed to factual, questions on issues that are presented on television in a markedly slanted fashion.

There are seven cultivation analysis data bases: three samples of adults and four of children. The adult samples (described in Table) include a telephone survey of 607 households in Philadelphia, Chicago, Los Angeles and Dallas (STARCH); a personal-interview survey of 2052 respondents in a national multi-phase probability sample (ORC); and secondary analysis on the National Data Program for the Social Sciences 1975 General Social Survey (NORC).

The four children's samples are described in Table . Three data bases are from a longitudinal study of children in a public middle school in a surburban/rural New Jersey community: children who responded to self-administered questionnaires in the 1974-1975 school year (NJKIDSI); those who responded in the 1975-1976 school year (NJKIDS2); and a panel of children who answered questionnaires in both years (NJPANEL1). Data on the same questions has also been collected from 10-13 year-old children currently attending the Bank Street School in New York City (BANKSTR). (The questionnaire used for BANKSTR is Appendix .) Analysis has been performed on the NJKIDS1 data, while data from the other children's samples await analysis.

Television violence and cultivation scores

The first rounds of our cultivation studies have dealt in large part with the issues implicit in our findings on television violence. To the extent that the pattern of television violence and victimization cultivates conceptions of social reality, heavy viewers should be more likely than light viewers to exaggerate danger and violence and law enforcement activities in the real world, and generally project assumptions that would underly a heightened sense of fear and risk. Furthermore, these viewing-related overestimations might also relfect the different patterns of victimization and such other assumptions in viewers of different sexes, ages, and educational levels might apply to their own situations.

A question from the quota sample survey (STARCH) that bears on the potential lessons of television violence is this: "During any given week, what are your chances of being involved in some type of violence?" The respondent could overestimate the chances by answering "about 50-50," which is closer to the answer found in the world of television, or give the other answer, which was "one in a hundred." The cultivation differential is the percentage difference between heavy viewers (4 or more hours a day) and light viewers (less than 2 hours a day) giving the "television answer." A positive CD score would show that to that extent -- and all other factors being equal -- viewing does tend to cultivate TV's version of the world in the minds of viewers with respect to a particular question; a zero or negative CD score would suggest that it does not. The actual finding, shown on

Figure 8, is +13 for all respondents, meaning that 13 percent more heavy than light viewers selected the television answer, which is a significant cultivation differential in the expected direction. In other words, substantially more heavy than light viewers of television overestimate the danger of violence to themselves in everyday life.

Figure 8 shows that all cultivation differentials are positive. A college education counteracts the cultivating effects of television especially for light viewers. Television overcomes the effects of college for heavy viewers; they choose the "television answer" in the same proportion as do the light viewers without a college education. The heavy-viewing no-college group is of course the most likely to choose the "television answers."

The effects of newspaper reading are similar to those of education, with which they are undoubtedly related. TV news and news magazines, however, do not seem to make a difference. The results on sex differences show that only male light viewers escape the heightened sense of danger. Additional information comes from the more detailed analysis of our national probability sample (ORC) responses. These results confirm and extend the findings obtained from the quota sample. The college group is usually less likely to give the "television answer" than the no-college group, but heavy viewing tends to neutralize the effects of education and result in large cultivation differentials, especially among women. Women consistently report higher estimates of violence and law enforcement than men, or higher cultivation differentials, or both. Age emerges as an important factor, with those under 30 generally conforming more to the TV view of violence than those 30 and over.

In order to permit a more comprehensive and broadly-based assessment of the separate and interactive effects of demographic and media variables, we have combined the responses to our questions from the national probability sample into a single indicator which we call the cultivation score. (Detailed wording breakdowns and breakdowns can be found in Tables 69, 71 and 73 of Appendix , Violence Profile No. 7.)

This score is produced by giving each response a value of 3 for the "television answer," 2 for a "don't know" or no answer and 1 for a "non-television answer." Respondents who gave more than two "don't know" answers were deleted. The scores were summed and could range from 4 to 12 for each respondent. Respondents with a total score of 8 or more were considered the "high scorers." Splitting the sample at this point resulted in 40 percent low scorers and 60 percent high scorers.

As Figure 9 demonstrates, the three-way viewing comparison permits the observation of a positive and generally linear relationship between the amount of television viewing and cultivation effects. The cultivation differentials can also be seen in F igure 9.

Women who are light viewers again exhibited greater assumptions of risk than male light viewers, as measured by high cultivation scores. Their apprehensions also rose more than the men's as the result of heavy TV viewing. Women thus show a greater tendency to be affected by the pattern of victimization both in the world of television and in their own conceptions of real life.

The overall education difference confirms and refines the pattern discussed before. The college educated light viewer is the least likely to give the "television answer" to our questions. But television has its greatest relative cultivating effects on college educated heavy viewers: they differ from college light viewers by 21 percentage points. In contrast, the difference between college educated and not college educated heavy viewers is only 14 percentage points.

Age emerges as a consistent influence. Respondents under 30 showed greater readiness to choose the "television answers" at all levels of TV viewing than older respondents. Younger light viewers responded like older heavy viewers, with younger medium and heavy viewers scoring even higher. It seems evident to us that those under 30 have grown up in a world in which television was an increasingly pervasive aspect of the cultural environment. In comparison with the older segment of the sample, those under 30 can in fact be considered to be members of the "television generation."

An examination of the combined influences of age, sex, and education on television's cultivating effects provides a closer look at these findings.

Age and education. Growing up with televison makes the presence or absence of alternative cultural influences especially important. In the absence of alternatives such as a college education might provide, television has little or no competition in the formation of concepts and assumptions about the world. It seems to make little difference whether a member of the "television generation" who has had no college experience is a light or heavy viewer.* It can be seen on Figure 10 about four out of five light or heavy

^{*}It should be noted that the proportion of college educated respondents is higher in the under-30 than in the 30-and-over group.

viewers of the "under 30" generation who had not gone to college scored high in the television cultivation test. Such high scoring may be so close to the "ceiling" of the test that cultivation differentials cannot be obtained or expected.

The dominance of television's cultivating effects since early childhood also blunts the countervailing influence of a college education. But college makes a striking difference in responses, provided that the respondent is a light viewer of television. There is a 30 percentage point "college gain" (i.e. reduction in high cultivation scores) between the light viewing "college" and "no-college" respondents of both age groups (even though the "under 30" group generally scores higher).

This "college gain" for light viewers, however, was nearly overcome by a cultivation differential of 22 percentage points between the light and heavy viewers of the college respondents in both age groups. Heavy viewing of television cuts the "college gain" in half or less, especially for the younger group. In that group college reduced the light viewers' score by 31 percentage points; it reduced the heavy viewers' score by only 12 percentage points. Comparable figures for the "30 and over" light viewers and heavy viewers, respectively, are 30 and 16 percentage points.

Patterns associated with age and education thus seem to interest (1) to boost TV's cultivating effects in the younger and less educated group, (2) to cancel out the effects of differences in the amount of viewing in that group, (3) to make college education an important alternative influence on cultivation levels in both groups; (4) but to make the "TV generation's" heavy viewers gain much less of a sense of alternative conceptions from college than either the light viewers of both age groups or the heavy viewers of the older group.

If one were to try to pit the influence of college and age against that of television, one might conclude that TV's cultivating effects (22 percentage points) outweigh the contrary influences of both age and college among heavy viewers (16 percentage points both), but that the college experience reduces the cultivation effects among light viewers by a margin equal to or greater than TV's cultivation differentials.

Sex, education, and age. We have seen that women generally score higher on the "television answers" than men in the corresponding groups. We have also seen that college and age tend generally to reduce those scores. But while the level of education affects men's scores more than women's, age influences women more than men.

The differential effects of college and age on the television scores of men and women can be seen on Figure 11. College reduces the light viewing male score by 32 and the heavy viewing male score by 16 percentage points; the figures for women are 20 and 9 percentage points, respectively.

Age, on the contrary, has a greater and different influence on women. Unlike with men, heavy viewing increases the difference between the female age groups and makes the younger women stand out as the most vulnerable to the television view. These interactions can be further clarified by looking at the combined effects of age and education in each gender group.

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Figure 12 shows these effects. The cumulative influence further extend the sex differences in the directions indicated before. College makes its greatest impact on the cultivation scores of the older male light viewers. Television achieves its greatest cultivation differentials with the younger college women. That is also the group most resistant to the moderating influence of college upon the cultivation score. In fact, college education makes no difference at all in the scores of young women, heavy viewers, whereas it makes a large difference in other groups.

Newspaper reading

Figure 13 permits comparisons between responses of television viewers and different groups of newspaper readers. The data from the quota sample discussed earlier indicated that newspaper reading (like being male, older,

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and better educated) tends to be associated with a reduction in the number of television viewers who score high on the cultivation questions. We can now also see that the light viewers of television were not affected by the amount of newspaper reading but that the heavy viewers were. The more the heavy TV viewer reads the newspaper the smaller the cultivation differential, as well as the absolute score. But within each newsreading category, heavy viewers were more likely to give the "television answer" than the light viewers.

Perceptions of the intentions of others and cultivation scores

In the General Social Survey (NORC) on which we performed a secondary analysis, one area in which television shows cultivation effects is in respondents' perceptions of the intentions of others. As Table indicates, heavy viewers of television are much more likely than light viewers to project a "suspicious" view of the intentions of others. For example, 44 percent of heavy viewers and only 32 percent of light viewers answered that most people are "looking out for themselves." (Breakdowns of the questions in Table by age, sex, education, and newspaper reading, as well as television viewing, can be found on Tables 76, 77 and 78 of Appendix, Violence Profile No. 7.)

Longitudinal study

In his testimony before the Kefauver Committee's investigations of juvenile delinquency (1955), Paul Lazarsfeld asked, "Why is so little known about the effects of television on children and what can be done?"

We in the universities, with our limited funds, can do only shortterm studies. We put kids into laboratories, have them listen to programs and then find out what they think or feel a few minutes later. But the real problem is the cumulative effect of television, what it does to children six years, not six minutes later.

...What I am trying to argue is that we probably have to follow up all sorts of children for a period of 4 to 8 years to get a real picture of what role television plays in the development of personality....I submit that only such long-term studies would give us a realistic picture of the role of television in a child's personality development. (POQ, Fall 1955, pp. 243-251.)

One of the major efforts of the cultivation analysis portion of our project has been the initiation of a longitudinal study of a panel of school children. The first wave of the study comprised the administration of two questionnaires, in December of 1974 and March of 1975, and yielded a sample of 335 6th through 8th-graders in a rural/suburban New Jersey school (NJKIDS1). We have just completed the second wave of two questionnaires, in December 1975 and May 1976, and have retained 293 of our original group (NJPANEL1) plus an additional 381 children to whom we hope to question again next year. (These 674 children are NJKIDS2.) The design of the study can be seen in Table .

We have also administered a questionnaire which is a composite of the ones we have used in the New Jersey study to a sample of 150 ten through 13-year old children at the school of the Bank Street College of Education in Manhattan (BANKSTR); which should provide an illuminating contrast and supplement to our panel sample of suburban children.

Although it is premature to engage in longitudinal analyses of the data from these questionnaires, we have begun to look at cross-sectional comparisons of the responses as they allow us to examine the correlates of heavy television viewing, controlling for age, sex, parental education and employment status, etc. (NJKIDS1). Here again, we find the pattern of positive (usually significant) associations between television viewing and the tendency to give what we consider "television answers" to our questions, even when we control for important demographic variables.

To illustrate, we can look at the answers given by children who are light, medium or heavy television viewers to groups of questions dealing with violence, crime and law enforcement (Table), and to more personal educational, occupational, and family aspirations and expectations Table 2).

As we have found with our adult samples, children who watch a lot of television (and our criterion for heavy viewing in the children's sample is six or more hours per day!) seem more likely than are light viewers to exaggerate danger and violence and law enforcement activities in the real world, and generally project assumptions that would underly a heightened sense of ear and risk. Nor can these patterns be simply ascribed to other factors, such as their parent's levels of educational attainment, which are themselves strong predictors of television viewing levels. As the more detailed tables in Appendix (Tables 74, 75, 79 - Violence Profile No. 7) clearly show, the children of the college educated who watch a lot of television show the greatest differentials when contrasted with their more television abstaining peers. For example, of the children of college educated parents, 81 percent of the heavy television viewers overestimated the number of those employed in law enforcement, compared to 61 percent of the light viewers; while among those whose parents did not go to college the comparable figures are 79 percent and 70 percent. This is a characteristic finding -- the only group which seems relatively immune from the conventional images and stereotypes which we associate with the symbolic world of television drama is the group whose educational attainments (or that of their parents) are not matched with a heavy diet of daily television viewing. For the others, regardless of such alternative sources of information, imagery or opinion, watching a lot of television seems to predict a tendency to see the world in a fashion that is strikingly similar to the world that is portrayed on prime time.

The associations between television viewing and one's images and ideas go beyond the less personal, if hardly insignificant questions of crime and law enforcement, to matters of one's own life course expectations and aspirations.

Table includes questions which reflect upon the children's images of their own as well as society's patterns of educational, occupational and domestic outcomes. Here we can see a consistent pattern of association between television viewing and the tendency to choose, endorse or project a more conventional response or outcome to these questions. The heavy television viewers have lower educational aspirations and expectations; they expect to begin working full-time at an earlier age; they expect that they will marry younger, begin having children sooner, and have more children than do the lighter viewers. They are also more likely to express a parallel set of conventional values, believing that only the father should have a full-time job, that they would be happy if they (or, for boys, if their wives) were full-time mothers, but that only the father should discipline the children.

Once again, these results cannot be washed out by looking at the effects of the powerful demographic variables which unquestionably play more major roles in molding and maintaining these values and aspirations. As we have

detailed in an analysis of some of these patterns (cf. Appendix , "What do you want to do when you grow up, little girl?" by Larry Gross and Suzanne Fox), the children of the college educated who watch a lot of television are as conventional in their answers to most of these questions as are their classmates whose parents did not go to college. Interestingly, regardless of television viewing, the daughters of the college educated have high educational aspirations and this suggests the likelihood of emerging contradictions between these aspirations and the expectations of the heavy television viewers, for example, that they will marry young, have three or more children and be a happy full-time mother. Here, the gamma measure of association between television viewing and being happy about being a full-time mother is +.65 for the daughters of college educated patterns (p. .01) -- 39 percent of the light viewers and 65 percent of the heavy viewers give this answer -- as contrasted with the null pattern of +.02 for the girls whose parents did not go to college -- the "television answer" being chosen by 50 percent of the light and 57 percent of the heavy television viewers.

d. Publications

The research has provided the basis for several publications and other contributions. The most important are:

"Communications and Social Environment," by George Gerbner (Scientific American, September 1972. See Appendix A)

"Cultural Indicators: the Third Voice," by George Gerbner (Communications Technology and Social Policy, edited by George Gerbner, Larry Gross, and William Melody, Wiley, 1973)

"The Reality of Television Fiction: The Use of Semi-projective Techniques for the Study of Mass-Media Effects," by Larry Gross and Paul Messaris (presented at the International Communication Association, Montreal, April 1973)

"The Lessons That Television Teaches," by Larry Gross ($\underline{\text{Today's}}$ Education

Data and methods generated by the project are currently being utilized in the preparation of four Master's theses and three Ph.D. dissertations.

e. Staffing

The professional staff of the project has included:

- Dr. George Gerbner, principal investigator, throughout;
- Dr. Larry Gross, associate investigator, throughout;
- Mr. Michael F. Eleey, research associate, throughout;
- Dr. Nancy Signorielli, research associate, throughout;
- Ms. Suzanne Fox, research associate, September 1972;
- Ms. Marilyn Jackson-Beeck, research associate, August 1975.

B. SPECIFIC AIMS

- 1. Annual and semi-annual recording and message system analysis of prime-time (including "family-hour") and Saturday network television drama will follow methods and procedures used in the current Cultural Indicators study.
- 2. Sampling and reliable content analysis instruments will be developed, tested and applied to the accumulation and analysis of network national news programs and commercial messages. These will be incorporated into the recording and analysis procedures to further round out our image of the world of television.
- 3. Surveys incorporating semi-projective and other test items will be administered to various quota and probability samples of adults. The analysis of our three-year longitudinal study of 300 school children will guide our further testing of groups of children. The resources of other research efforts will be utilized through secondary analyses of appropriate survey data banks.

C. METHODS OF PROCEDURE

The methodologies employed in the study are those of mass media message system (content) analysis and of cultivation (effects) analysis. The most novel and significant developmental features of both the pilot study and the proposed investigation are the joining of the two methodologies and the formalization of periodic indexing and reporting of the combined results.

1. Message system analysis

Message system analysis is designed to investigate the aggregate and collective premises defining life and its issues in representative samples of mass-produced symbolic material. Such analysis rests on the reliable determination of unambiguously perceived elements of communications. Its data base is not what any individual would select but what an entire national community absorbs. It does not attempt to interpret single or selected units of material, or draw conclusions about artistic merit. The analysis is limited to functions implicit in the prevalence, rate, symbolic structures and distribution of clear and common terms in the samples.*

^{*}A description of the analytical framework can be found in "Toward Cultural Indicators: The Analysis of Mass Mediated Public Message Systems" by George Gerbner, in The Analysis of Communication Content; Developments in Scientific Theories and Computer Techniques, edited by George Gerbner, et al., New York: John Wiley & Sons, 1969.

The analysis of evening prime-time and weekend daytime (children's) network television drama will be repeated each year. The principal aspects of this procedure are the instrument of analysis, the program samples, the training of analysts, the coding procedure, and the assessment of the reliability of the observations.

The development and refinement of the instrument of analysis has taken account of the comments of the SSRC* panel and of the ongoing experience of the project itself. The instrument deals with each program as a whole, the cast of major and minor characters, selected types of action and character relationships. It facilitates the further development of the "Violence Profile" within the broader context of Cultural Indicators. (See Appendix Violence Profile No. 7)

The annual monitoring and analysis will include categories used before and others sensitive to new and changing issues of public policy. The history, geography, and demography of the symbolic worlds produced for common vicarious experience and learning will be analyzed. Interpersonal relationships portrayed in these message systems will be studied. Themes of nature, science, politics, law, crime, business, education, illness and health, peace and war, and sex, love, and friendship, as well as conflict and violence will be observed. Roles, traits; and fates of characters engaged in dramatic action will be related to the symbolic worlds in which they act and to the issues with which they grapple.

paragraph from Nancy and Mike

^{*}Social Science Research Council. "A Profile of Television Violence." Report submitted by the Committee on Television and Social Behavior of the SSRC, July 1975.

Coders using the instrument of analysis are trained in observation of a specialized kind. They must make reliable discriminations called for in the instrument and record these in a specified form. They focus on what is presented in the material and not how it might be judged by a critical viewer. Their task is to generate the data for the subsequent analysis and interpretation of common message elements and structures available to a public of diverse viewers.

Coding and training procedures

For the analysis of each program sample, a staff of between 18-24 coders is recruited. The initial period requires about three weeks of instruction and testing. Several introductory sessions are devoted to item-by-item discussion of the recording instrument. The trainee group is subsequently split into randomly assigned coding teams of two each, and all pairs then view and code three selected programs. Each coding pair works independently of all other pairs, and returns one joint coding for each program. In the next general meeting, the entire staff discusses the difficulties encountered in the three-program exercise. When these problems have been resolved, the coderpairs return to code seven additional programs selected from the tape archive for this training purpose.

The data generated by the coder-pairs on the ten training programs is keypunched and subjected to computerized analysis. On the basis of these results, instructions are further discussed and perhaps revised, and idiosyncratic coder pairs are assigned to other tasks or dismissed. Coder pairs who survive this testing process proceed to analyze the season's videotaped program sample.

During both the training and data-collection phases, coder pairs monitor their assigned videotaped programs as often as necessary, re-screening portions as needed. All programs in the sample are recorded independently by two separate coder-pairs to provide double-coded data for reliability comparisons. (For budgetary reasons, only 30 % of the programs in the 1967-1968 analysis were coded a second time.)

A final data set for subsequent analysis is compiled from the full data base by randomly selecting one of the two codings for each program. As a last check against deviant coding, reliability measures are computed for each pair, before the final selection. This procedure would identify problem coders who may not have been screened out in the training and pretest phase. In such an instance, the data recorded by the questionable pair would be excluded from the selection, and the alternative coding used. (Over the course of this study, only one such case has been encountered.)

Reliability measures are designed to ascertain the degree to which the recorded data truly reflect the properties of the material being studied and not the contamination of observer bias or of instrument ambiguity. Theoretically both types of contamination are correctable, either by refining the instrument or intensifying coder training, or as a last resort, by eliminating

Reliability measures are designed to ascertain the degree to which the recorded data truly reflect the properties of the material being studied and not the contamination of observer bias or of instrument ambiguity. Theoretically both types of contamination are correctable, either by refining the instrument or intensifying coder training, or as a last resort, by eliminating the unsalvageable variable or dismissing the incorrigible coder. Measures of reliability thus serve two functions: as diagnostic tools in the confirmation of the recording process, and as final evaluators of the accuracy of the phenomena's representations in the actual recorded data.

Five computational formulae are currently available for calculating the coefficient of agreement. The variations are distinguished by a difference function, the form of which depends upon the scale type of the particular variable being analyzed. Except for their respective scale-appropriate sensitivity to deviations from perfect agreement, the coefficients make the same basic assumptions as the prototype for nominal scales devised by Scott.* Thus, in the case of the binary variable, all formulae yield identical results.**

The reliability of the analysis is thus ascertained by multiple codings and the measured agreement of trained analysts on each usable item. If one were to substitute the perceptions and impressions of casual observers, no matter how sophisticated, the value of the investigation—would be reduced, and its purpose confounded. Only an objective analysis of unambiguous message elements, and their separation from personal impressions left by unidentified clues, can provide the basis for comparison with audience perceptions, conceptions, and behavior.

2. Cultivation analysis

The progress report of the pilot project has already accounted for the use of semi-projective picture tests and survey instruments developed in preparation for the main stage of the cultivation analysis. Here we shall note the more theoretical aspects of our methodological approach.

Cultivation analysis begins with the patterns found in the "world" of television drama. The common message systems composing that world present a coherent image of life and society. How is this image reflected in the images, expectations, definitions, interpretations and values held by its audiences? Do people see the world as TV shows it? In some cases, the old West for example, most people know little else but what they see on TV and in the movies. How are the "lessons" of symbolic behavior derived from other times and places,

^{*}William A. Scott, "Reliability of Content Analysis: The Case of Nominal Scale Coding," Public Opinion Quarterly 17:3:321-325, 1955.

^{**}For the derivation of the formulae and discussion of their properties, see Klaus Krippendorff, "A Computer Program for Analyzing Multivariate Agreements, Version 4," Mimeo, Philadelphia: University of Pennsylvania, The Annenberg School of Communications, July 1973. For a more extended discussion by the same author of part of this family of coefficients see "Bivariate Agreement Coefficients for the Reliability of Data," in E. F. Borgatta, ed., Sociological Methodology, 1970, San Francisco: Jossey-Bass.

and presented in synthetic, fictional contexts, applied to assumptions about real life? Clearly, the impact of the television world on the real world of the viewers is subtle and complex. Klapper's comprehensive survey* noted the paucity of investigation in this area. One major U.S. investigation involving children, reported in 1961,** was limited to small community surveys and was not related to symbolic functions of television program content. The more varied and often more sophisticated studies conducted for the Surgeon General's Scientific Advisory Committee on Television and Social Behavior*** were similarly in no position to base their investigation of presumed media effects upon a careful and systematic study of media portrayals. Therefore, in order to improve procedures for the investigation of the cultivation effects of the actual message systems to which large viewing publics (and, indirectly, the entire community) are exposed, it was necessary to utilize an extensive data base and to develop new tools and techniques. That is what the pilot project (reported above) has done.

The principal approaches employed in the cultivation analysis will continue to be semi-projective techniques and periodic questions on national probability and quota sample surveys. Samples of children will provide the subjects for additional projective and interview work.

The central methodological tool we are using in our examination of the images of reality which may be cultivated by television drama is the semi-projective procedure. Projective tests are most commonly used by clinical psychologists who wish to

. . .approach the personality and induce the individual to reveal his way of organizing experience by giving him a field (objects, materials, experiences) with relatively little structure and cultural patterning so that the personality can project upon that plastic field his way of seeing life, his meanings, significances, patterns, and especially his feelings.****

^{*}The Effects of Mass Communications by Joseph T. Klapper. The Free Press, 1960. See e.g. p. 251.

^{**}Television in the Lives of Our Children by Wilbur Schramm, Jack Lyle, and Edwin B. Parker. Stanford University Press, 1961.

^{***}Television and Social Behavior edited by G. A. Comstock and E. A. Rubinstein, Volumes 1 to 5. Washington: Government Printing Office, 1972.

^{****}L. K. Frank, "Projective Methods for the Study of Personality," Journal of Psychology, 8:389-413, 1939.

Our use of the term semi-projective is intended to reflect two major differences between our approach and that of the clinician. Our stimulus material is more structured than most projective test materials, and utilizes a wider range of techniques. Second, we are interested in a rather different level of analysis. Here we are close to the position taken by Greenstein and Tarrow, who used semi-projective methods to study the political orientation of children:

The resulting data are interpreted at a surface (sociocultural) rather than a deep (psychodiagnostic) level. That is, the interpretive interest is in what orthodox projective testers treat as chaff: values, cognitions, perceptual sets, characteristic ways of perceiving social situations, expectations about actions that will take place under specified circumstances, and so forth.*

The impact of television on children has been of particular concern in this project. Along with parents, teachers and peers, television is an undoubtedly potent factor in the socialization and acculturation of our children. Little, however, is known about the effects of television on the formation of values, expectations and attitudes in children.

To estimate and evaluate the effect of media exposure, we have initiated a longitudinal investigation of the development of values and the image of reality in a panel sample of children. In such longitudinal perspectives, we are examining the emergence of sex-role concepts, political and historical attitudes and images, and the awareness of social problems and issues (e.g. violence, drugs, ecological crises) as they are influenced by TV exposure.

The longitudinal study of school children will have covered three years and will include the administration of six questionnaires (fall and spring, December 1974 through April 1977) to groups ranging in number from 335 to over six hundred. Our present projections indicate that we will be able to analyze our data in a number of ways, most importantly as a longitudinal panel of approximately 300 children who we can follow from the 6th, 7th or 8th grade through the 8th, 9th and 10 grade, respectively. In addition, each wave can be analyzed cross-sectionally, yielding an eventual array of over 1500 completed questionnaires from children in the 6th through the 10th grade.

Clearly, a study of this scope and complexity will require a considerable amount of time and effort for analysis and interpretation. Much of our attention in the first year after completion of the third wave of data collection will be devoted to preparing the data and the initiation of analysis. We will continue to conduct questionnaire and other studies of groups of children — such as the administration of a questionnaire to 150 10 through 13-year olds at New York's Bank Street College School, which we have just completed at

^{*}F. I. Greenberg and S. Tarrow, <u>Political Orientations of Children:</u>
<u>The Use of a Semi-Projective Technique in Three Nations</u>. Beverly Hills: Sage, 1970.

this writing -- but our primary assumption is that we will be able to improve our ability to conduct such studies as we learn more from our analysis of the New Jersey study. We expect to be aided in this learning by the results of a doctoral dissertation to be conducted next year by Suzanne Fox, in which a carefully selected sub-sample of our New Jersey school children, and their parents, will be interviewed at length about their beliefs, opinions, and life course expectations. We hope that the combination of a questionnaire survey over a long term with the depth interviews will offer insights and guidance for our future efforts that are not afforded by either method used exclusively.

In addition, we expect that by the second year of the proposed research, we will be able to capitalize on the inclusion of samples of news programs and commercials in our message analysis. Once we feel that we have achieved reliable and interesting indicators of the images and symbolic functions of these segments of television programming — insofar as they are found to differ significantly from those we have already identified in analyzing television drama — we will develop and incorporate ways of assessing how these might influence the images and conceptions held by viewers. We would expect that further studies of adult and children viewers would thus allow us to shed light on an even wider spectrum of possible correlates and consequences of television viewing.

The other major approach will be the survey method. Questions selected from the projective and interview techniques, and others designed especially for survey use, will be submitted to national adult probability and quote samples of respondents. The responses will yield indications of the dynamics of cultivation, and will also be useful in comparisons with responses yielded by other methods.

We have found a number of surveys conducted by other researchers which include questions that are close and have initiated secondary analyses of these materials. In one important instance, we succeeded in convincing the NORC to insert a question on the 1975 General Social Survey which ascertained the television viewing habits of their national adult probability sample (see Table , above). We are currently analyzing this survey from the perspective of our own project and interests. We plan to obtain and analyze data from the 1976 National Election Study of Survey Research Center, University of Michigan; and we will continue to encourage and search out such oppoetunities for maximizing our analytic scope.

Are audiences aware of the distortion, both explicit and implicit, in television's world? Will viewers reproduce the TV "line" when asked to describe, evaluate, predict or analyze events in the real world? Here the "error-choice" technique will be utilized. Further, will viewere distinguish between the reality of TV drama and that of news? Can they see, and will they

report differences? How are the controversial issues — war, crime, drugs, youthful unrest, sex roles — reflected via TV drama and news in the minds of audiences? How accurate is the public knowledge of the facts, and how close their definitions to those offered explicitly and implicitly on television? How consistent and how homogeneous are these conceptions? Regardless of their direction and nature, are the responses of heavy viewers more alike than those of non-viewers? Does television create a range or a consensus of knowledge, or of ignorance? Does a homogeneity of response, if it exists, extend to issues unrelated to television drama and its immediate impact?

The results of our research (reported above) demonstrate the feasibility and usefulness of this approach for the specific assessment of the contributions television makes to the cultivation of public images of social reality.

D. SIGNIFICANCE

Culture is that system of messages which cultivates patterns of shared images and, therefore, of social behavior, relationships, and interactions. Acculturation is that critical aspect of socialization which denotes the development of stable images of self and the world, and of how to behave in one's world. The dominant communication agencies produce message systems that cultuvate the broadest common notions of what is, what is important, and what is right. They structure the public agenda of existence, priorities, and values. People use this agenda — some more selectively than others — to support their ideas and actions. Any significant change in the technology, ownership, clientele, outlook, or other institutional characteristics of dominant communication agencies may alter the patterns.

In a folk culture, the production of traditional symbols and figures (representations of gods, chiefs, demons, animals, and men), the conduct of rituals, and the spinning of tales inspire awe and strike terror, as needed, to control the "growing up" process. In mass cultures, institutional policies and manufactured symbolic commodities cultivate norms of conduct.

Mass communication is the extension of institutionalized public acculturation beyond the limits of face-to-face and any other personally mediated interaction. This becomes possible when technological means are available and social organizations emerge for the mass production and distribution of messages. Mass media are such technological means and social organizations, with television being the most broadly shared and ubiquitous of American mass media.

A long series of private and government commissions, Congressional committees, and foundation-supported studies have, since the early 1930'ies, called for some sort of media surveillance. But none of these proposals spelled out how that might be done, or limited the scope to manageable proportions clearly relevant to scientific purpose and public policy. And, at any rate, none of them was implemented.

Our prior studies, supported by the National Science Foundation, the Surgeon General's Scientific Advisory Committee on Television and Social Behavior, the National Institute of Mental Health, and other agencies, have established the basis for and have demonstrated the feasibility of this project. Social scientists, legislators, and government agencies have called for the development of indicators and profiles of cultural trends relevant to salient issues of social health and national policy, and conducted in a broad and sophisticated framework.

We need to know general trends in the cultivation of assumptions about problems of existence, priorities, values, and relationships before we can validly interpret specific relevant policies or facts of individual and social response. Interpretations of public opinion (i.e. published responses to questions elicited in specific cultural contexts), and of many media and other cultural policy matters, require cultural indicators similar to the accounts compiled to guide economic decisions and to other indicators proposed to inform social policy-making.

The most general significance of cultural indicators will be, therefore, that of a systematic and reliable surveillance of mass-cultural configurations and of their symbolic functions. A more specific area of significance will be the testing of a theory of symbolic functions which contends that mass-distributed (televised) dramatic entertainment provides common and ritualistic demonstrations of social relationships, powers, and values, and, furthermore, that these symbolic functions cultivate the most pervasive public conceptions of social reality.

E. FACILITIES AVAILABLE

The Annenberg School of Communications, University of Pennsylvania, is a graduate school devoted to the training of researchers and scholars in the field of communication study. It has the faculty, staff, facilities, and other trained personnel necessary for the guidance and conduct of this project.

Adequate space, computer terminal and central facilities, and all other School and University resources for supporting large-scale research projects are available to this study.