

## AGING WITH TELEVISION

Images -- and self images -- viewers derive from television drama, and how they can affect the experience of aging and the values and support for public policy toward the aged

A grant application in support of a program of research and action submitted to the Office of Human Development, Administration on Aging

by

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### INTRODUCTION

We propose research and action designed to contribute to the development of program and policy initiatives aimed at improving the circumstances of individual older persons in America. The accumulated experience, resources, and energies of a team whose research in the television violence area has made a significant impact on national awareness and policy will now be directed to new objectives. The objectives include a scientific analysis of the image of aging and the aged presented in television drama, wide dissemination of the results of this research, and a prototype workshop where citizens, organizations, and media practitioners meet to work out tactics and policies of desirable portrayal and effective utilization of the products of both research and media relevant to aging and the aged. Further workshop and conferences modeled after this prototype may be proposed in subsequent applications.

This proposal focuses on Strategy Area C described in the AoA Guidelines (July 1, 1977) as "Concerned with conditions in the larger environment that

affect the response of society to the needs of the elderly." More specifically, we wish to address Researchable Question C-1: "What is the American value structure in areas of crucial relevance to the personal and societal context within which old age is experienced in America?" Going one step further, we also wish to explore and implement suggestions of what can be done to improve these conditions both in terms of social philosophy (represented on this project by the senior co-principal investigator who is the author of such philosophical works) and in terms of specific organizational and media policy.

The dissemination and utilization plan sets out a specific list of persons and organizations as the initial mailing list of the results and action and policy implications of the project, and outlines the prototype workshop to be held.

The focus on low-income and minority older persons will be evident throughout both the television analysis phase and the implementation phase.

## I. RESEARCH OBJECTIVES

Television is the mainstream of the common symbolic environment which cultivates the most widely shared conceptions of reality and of value. What have been its contributions to public conceptions in areas of crucial relevance to the personal and societal context in which old age is experienced in America? Have these contributions changed in the past ten years? What have viewers of different ages learned from television's most vivid lessons -- its dramatic fare -- about aging and the aged in general and about low-income and minority aged in particular? Will today's children exposed to contemporary children's and adult fare have a different orientation as they grow old in the next decades? What help does television

provide and what obstacles does it pose for obtaining greater public support for policies designed to improve the circumstances of the elderly? These are the questions addressed in the proposed research.

This project, a Full Scale Study, will begin with the secondary analysis of our television content and effects data archives and will go on to develop and implement a procedure for the continuing monitoring of the role of television in shaping public conceptions of aging and the aged.

The proposed project is based on a unique data bank and research design called Cultural Indicators.<sup>1</sup> This research began with the investigation of violence in network television drama in 1967-68 for the National Commission on the Causes and Prevention of Violence. It continued under the sponsorship of the Surgeon General's Scientific Advisory Committee on Television and Social Behavior, the National Institute of Mental Health, and the American Medical Association. Although violence-related findings and indicators have been published most widely, the approach was broadly based from the beginning to collect observations on the role and symbolic functions of several specific aspects of life -- including age -- presented in television drama.

The research consists of two interrelated parts: (1) Message System Analysis -- monitoring the world of television, and (2) Cultivation Analysis -- determining the conceptions of social reality that television tends to cultivate in different groups of child and adult viewers. The analyses provide information about the geography, demography, character profiles, group relations, and action structure of the world of television, and will focus these images and lessons upon aging and the aged.

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A list of publications describing the analytic framework of Cultural Indicators as well as some of the results of this research may be found in Appendix I.

### Message System Analysis

Cultural Indicators research begins with Message System Analysis, a flexible but precise tool for making orderly objective and cumulative observations of programming content. This technique allows us to identify almost any aspect of the television world, so that we can then test its contribution to viewers' conceptions of the real world.

Message System Analysis has been performed on more than ten annual samples of prime-time and weekend daytime network dramatic programming. The data base includes more than a thousand television programs and several thousand characters, actions and relationships. Coded observations are stored in a computer, available for further analysis and study.

The cumulative data base enables us to identify long term trends. For example, our annual Violence Profile and Index has charted the fluctuations of violent relationships and action in dramatic programming for the last ten years. With the annual Message System Analysis and our data bank, we can trace similar fluctuations and developments relevant to aging and the aged. Detailed and comprehensive demographic classification enables us to pay special attention to low-income and minority older persons.

### Cultivation Analysis

Our up-to-date data bank of patterns and trends in the world of television drama is the foundation for our studies of viewer's conceptions of social reality.

The second step of the research, therefore, determines what viewers learn about the real world from the world of television drama, a world in which Americans spend more time than in work or school or play. In order to uncover this information, we turn the findings about the television world into questions

about social reality. Each of these questions has a "television answer" -- the way it is in the world of television -- and another, different answer which is usually more typical of reality. These questions are presented to viewers as part of national probability and quota surveys.

While no member of society can remain unaffected by an influence so pervasive as television, those who spend more time in the world of television have been found to be more likely to perceive the real world in terms of television's lessons. Responses to our questions allow us to assess the degree to which the more frequent viewers give answers which reflect television's image of the world. These patterns are examined in light of various controls -- age, sex, education, occupation, etc. -- in order to determine the extent to which it is possible to view television's influence as independent, complementary or contrary to other major social variables.

TELEVISION AND THE ELDERLY  
Television and the Elderly

Television is accepted as a normal and important part of American life. Most Americans own at least one television set<sup>2</sup>, most people watch television for at least two to three<sup>3</sup> hours each day<sup>4</sup>, and in most areas of the United States, television is available round the clock. Moreover, television is so pervasive that researchers have noted that by the age of eighteen, a child has spent as much time watching television as in school<sup>5</sup>.

<sup>2</sup> Jack Lyle, "Television in Daily Life: Patterns of Use, Overview," Television and Social Behavior, Vol. IV, Television in Day-to-Day Life: Patterns of Use, eds. Eli A. Rubinstein, George A. Comstock and John A. Murray, (Washington, D.C.: GPO, 1972), pp. 1-32.

<sup>3</sup> More recent estimates put this figure at five to seven hours per day.

<sup>4</sup> J.P. Robinson, "Toward Defining the Function of Television," op.cit. pp. 568-603; and Lyle, loc. cit.

<sup>5</sup> For example, Wilber J. Schramm, Jack Lyle, and Edwin P. Parker. Television in the Lives of Our Children, (Stanford, Calif: Stanford University Press, 1961).

Television is also a very important part of the lives of elderly Americans. Riley and Foner<sup>6</sup> looked at how the elderly spend their leisure hours. When asked how they spent their time "yesterday", 70 percent replied that they had watched television, 68 percent visited others, and 61 percent did some reading. Watching television was the activity in which more people engaged and in which they spent the most amount of time (3 hours).

The frequency of television viewing increases as people get older. One study, reported in Riley and Foner (Volume 1), asked respondents if they participated in certain leisure activities as frequently as they had three to four years ago. Those 65 and over replied that while they saw fewer movies (48 percent), they watched television at least as often (42 percent), if not more often (39 percent) than before.

Richard Davis<sup>7</sup> studied viewing behavior by taking direct measurements from the television sets of an elderly population. The average time spent watching television (3.4 hours daily) was higher than that found in previous studies of this population using self-reporting techniques. In three studies, Davis consistently found that people who were 65 and older, preferred information type programming, such as news and public affairs.

#### The Functions of Television for the Elderly

In our society the aging process is generally characterized by increased disengagement. A growing sense of loneliness, uselessness, and alienation accompany the separation of the individual from friends, occupation and family.

<sup>6</sup> Riley, Matilda White and Anne Foner. Aging and Society, Volume One: An Inventory of Research Findings, New York: Russell Sage Foundation, 1968.

<sup>7</sup> Davis, Richard H., Allen E. Edwards, Dennis J. Bartel and Dorian Martin. "Assessing Television Viewing Behavior of Older Adults," Journal of Broadcasting 20(1), 1976, pp. 69-76.

The feelings of isolation and loneliness increase as the amount of social interaction decreases with age.

Wilbur Schramm<sup>8</sup> has hypothesized a "special function" of the mass media that combats disengagement. The mass media, of which television is the most frequently used, help the elderly to keep in touch with their environment and "maintain a sense of belonging to the society around them."

With disengagement and mental and physical decrements, the elderly partake in compensatory behaviors. That is, they seek and find "alternatives in which the financial, social, physical, or other losses associated with aging don't count against them as severely."<sup>9</sup> Graney and Graney found evidence to support this theory, demonstrating that the mass media such as television may be a prime component of this type of behavior because television viewing is "free", safe and non-threatening.

However, what are the lessons television teaches about old age? Does television help "combat" disengagement as Schramm has suggested or does it serve to increase the elderly's sense of alienation and uselessness by negatively portraying the elderly and the aging process?

#### The Image of the Elderly on Television

Although the literature of communications is replete with content studies of mass media worlds, few studies focus upon the portrayal of the elderly and the aging process in television programs. Moreover, most of this sparse body of knowledge of the portrayal of the elderly comes from Cultural

<sup>8</sup> Schramm, Wilbur. "Aging and Mass Communication, " in M.W. Riley, J. Riley, M. Johnson, A. Foner, and B. Hess (eds.), Aging and Society, II: Aging and the Professions, New York: Russell Sage Foundation, 1969.

<sup>9</sup> Graney, Marshall J. and Edith E. Graney. "Communication Activity Substitutions in Aging," Journal of Communication, 24(4), 1974, pp. 88-96.

Indicators research focusing primarily upon other areas of investigation.

Even though the Grey Panther's "Media Watch" cannot be considered "pure" or "academic" research, this group provides useful information by monitoring the way senior citizens are treated on television. According to Lydia Braggar, chairperson of "Media Watch", old people are depicted as "ugly, toothless, sexless, incontinent, senile, confused and helpless ... Old age has been so negatively stereotyped that it has become something to dread and feel threatened by."<sup>10</sup> Ms. Braggar concludes that when television is not presenting the elderly as ridiculous, it ignores them.

According to Marilyn Peterson<sup>11</sup>, Ms. Braggar is not accurately describing either the role or visibility of the elderly on television. Peterson content analyzed 30 half-hour segments, randomly sampled by day, time-slot, and network during one week of broadcasting. In general, she found that the elderly were portrayed in proportion to their representation in the population. However, older women were grossly underrepresented, while older men were overrepresented. Old people were portrayed as active (93 percent), independent (82 percent), and in good health (82 percent).

However, the results of most content analyses that provide information about the portrayal of the elderly in television programming, tend to support Ms. Braggar's contentions rather than Peterson's findings. Northcott<sup>12</sup> analyzed evening (7 - 10 PM) dramatic programs with modern settings. Characters who appeared for at least two minutes were recorded and coded according to age, occupation, sex, race, ethnicity, social role, dramatic role, physical state,

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<sup>10</sup> O'Hallaren, Bill. "Nobody (in TV) Loves You When You're Old and Gray." The New York Times, July 24, 1977, p. 21.

<sup>11</sup> Peterson, Marilyn. "The Visibility and Image of Old People on Television." Journalism Quarterly 50(3), 1973, pp. 569-573.

<sup>12</sup> Northcott, Herbert. "Too Young, Too Old - Age in the World of Television." The Gerontologist 15(2), 1975, pp. 184-186.

mental state, and living situation. Characters over 64 years of age accounted for only 1.5 percent of the recorded presentations (N=464), and five of these seven characters played only minor roles.

Northcott also found that the elderly portrayed roles that contrasted with either the "competent" adult male or the youthful, attractive female. Moreover, the elderly often relied upon these character genres for assistance. An analysis of dialogue concerning aging revealed that there were three negative statements about old age for every positive statement.

Dramatic network television programs broadcast during prime-time and weekend daytime hours and the characters who populate these programs have been subjected to extensive analysis in our on-going research project, Cultural Indicators. This research revealed that from 1969-1976 only 2.9 percent of the major characters could be classified as elderly; 2.7 percent of the male major characters were elderly and 3.4 of female major characters were elderly. Some of these analyses isolated the social structure in television drama by looking at the ratio of characters who inflict violence (violents) and characters who suffer violence (victims). These risk ratios are obtained by dividing the more numerous of these two roles by the less numerous within a number of demographic classifications. A positive ratio indicates that there are more violents or killers than victims of killed while a negative ratio implies that there are more victims or killed than violents or killers. The Violence-Victim ratio for major characters analyzed from 1969-1976 is -1.21, meaning that for every violent there were 1.21 victims. This research also revealed that age groups were especially differentiated by the risk ratios, that is old women have particularly high risks of victimization (-3.00) and all old people have greater chances of being killed than of killing (-3.00). Moreover, elderly

women are portrayed only as being killed and never as killers.<sup>13</sup>

Craig Aronoff<sup>14</sup> studied 2,741 characters appearing in programs analyzed as part of the Cultural Indicators Project between 1969 and 1971. He found that the elderly comprised only 4.9 percent of the characters in non-cartoon network drama. Moreover, there were about the same number of elderly men and women. Aronoff found that the chances of male villainy increased with age, as did their rate of failure. Older females failed more often than they succeeded. "In a world of generally positive portrayals and happy endings, only 40 percent of older male and even fewer female characters were seen as successful, happy, and good."<sup>15</sup>

Signorielli subjected the 1969-1972 Cultural Indicators Project data base for major characters to extensive analysis. In one study<sup>16</sup> she found that the elderly made up only 5 percent of the sample of major characters who populated non-cartoon dramatic network programming. Another more extensive analysis of this data base<sup>17</sup> revealed that age was one of three important dimensions of characterization. Moreover age was related to personality traits in that young characters (especially children and adolescents) were usually portrayed with

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13 George Gerbner, Larry Gross, Michael F. Eleey, Marilyn Jackson-Beeck, Suzanne Jeffries-Fox and Nancy Signorielli. Violence Profile No. 8, Annenberg School of Communications, University of Pennsylvania, 1977.

George Gerbner and Larry Gross. "Living with Television: The Violence Profile," Journal of Communications, 1976; 26:2, 173-199.

14 Aronoff, Craig. "Old Age in Prime Time." Journal of Communication 24(4), 1974, pp. 86-87.

15 Aronoff, *ibid.*

16 Nancy Signorielli (Tedesco), "Patterns in Prime Time", Journal of Communication, 1974, 24:2, 119-124.

17 Signorielli (Tedesco), Nancy. "Men and Women in Television Drama: The Use of Two Multivariate Techniques for Isolating Dimensions of Characterization." Ph.D. Dissertation, University of Pennsylvania, Philadelphia, Pa., 1975.

positive personality traits while old characters had more negative traits. She also found that in this sample of dramatic programs, older males were usually presented as "ineffectual" and that older females were most likely to be victimized.

Other findings about the way the elderly are presented in television often comes from other research. For example, Mildred Downing's<sup>18</sup> analysis of daytime serials revealed that female characters were younger than male characters, and had a greater deterioration of occupational status as they grew older. Downing concluded that, "Still, the mature woman receives better representation in the daytime serial than on most other types of television programs."

The above discussion reveals that knowledge about the portrayal of the elderly in television programming is sketchy as well as somewhat contradictory. We know that the elderly make up a small proportion of the population of television characters, that the elderly are often portrayed as ineffective, as victims, as evil and/or unsuccessful. However, that is basically all we know -- we know relatively little about the portrayal of the elderly in regard to other demographic variables such as occupation, marital, family and especially lower-income and minority status; or the program settings in which elderly characters are found; or the types of relationships elderly characters have with other characters.

Moreover, we know nothing about how these portrayals affect people's perceptions of social reality; that is, what do people learn about being old from television? Do people who watch a lot of television have different perceptions of the elderly or old age? And, do older people's perceptions of their own roles and of the world tend to reflect reality or television?

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Downing, Mildred. "Heroine of the Daytime Serial," Journal of Communication, 24(2), 1974, pp. 130-137.

The many stages of this study will provide answers to these questions. The proposed project will provide a reliable picture of the way old age and the elderly are presented in television drama and will provide information about how these images may affect people's perceptions of social reality.

Finally, there is neither reliable knowledge nor broad experience available to guide national, state, and local community organizations and media in dealing with and improving these images and role models. Although some recent projects and conferences did attempt to find such common ground, they had only individual program production experience and general surveys or case studies to guide them. None had the kind of special systematic, cumulative, and comprehensive symbolic environmental value and image patterns this study will provide to form the basis for the proposed prototype workshop.

The potential impact of that research base on both public understanding and public and media policy is considerable. Such impact can be compared to that resulting from our recent studies of television violence and the annual Violence Index and Profile which have changed policy and raised public awareness to unprecedented levels.

Given similar goals and procedures, the proposed project should also lead to the development of an Age Index and Profile which can then be used on an annual basis to monitor and track future media policy and to guide citizen and media policy. Therefore, individual, organizational, media self-regulatory and possible public regulatory policy (e.g. a "fairness doctrine" on age or a new television code provision) are all affected by the objectives of this research and action plan.

The last but certainly not least of our objectives is the wide publication and other dissemination of the findings and their implications.

There again, our television violence studies are the best guides to affecting public consciousness as well as policy. More about that and a partial list of publications resulting from previous similar efforts will be found below.

## II. RESEARCH PLAN

The proposed study is divided into three parts:

- (1) Secondary Analysis of the Cultural Indicators Project and other relevant data bases relating to age and aging.
  - (a) Secondary Analysis of Message System Analysis data base to isolate the image of the elderly (and other age groups) in prime-time and weekend daytime dramatic network television programming.
  - (b) Secondary Analysis of Cultivation Analysis survey data collected in four samples of adults.
  - (c) Secondary Analysis of the Harris Poll on Aging (National Council on Aging funded by Merrill Clark Foundation).
- (2) Development, pilot testing and implementation of a Message System Analysis recording instrument focusing upon the portrayal of the elderly, old age, and growing old. The instrument will be applied to a sample of prime-time and weekend daytime network dramatic programming.
- (3) Development and implementation of an instrument for Cultivation Analysis focusing upon old age and the elderly.

### (1) Secondary Analysis of the Cultural Indicators Project Data Archives

The Cultural Indicators Data Archives consists of two bodies of data -- Message (content) Analysis data (coded observations of "facts of life" in samples of network television drama) and Cultivation Analysis data (responses of adult and child viewers reflecting what they learn from televised "facts of life").

Message System Analysis

Message System Analysis I

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 or ability to "sell" products. The analysis is limited to functions implicit in the prevalence, rate, symbolic structures and distribution of clear and common terms in the samples.<sup>19</sup>

The proposed secondary analysis will isolate the image of the elderly in prime-time and weekend daytime network dramatic television programming. The analysis will use a data base consisting of eight one-week samples<sup>20</sup> (1967-1976)<sup>21</sup> of programs aired in the early to mid-fall of each year, and two

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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: Development in Scientific Theories and Computer Techniques*, edited by George Gerbner et al, New York: Johan Wiley and Sons, 1969.

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A sample of an entire week of dramatic programming has been demonstrated to be as generalizable to a year's programming as larger randomly selected samples. A sampling experiment, conducted in 1969, found no significant differences between dimensions of program style, format, type and tone across the solid week sample and a sample constructed according to the same time parameters but selected by a one program a day random selection procedure. Michael F. Eleey, "Variations in generalizability resulting from Sampling Characteristics of Content Analysis Data: A Case Study (The Annenberg School of Communications, University of Pennsylvania, 1969). In addition a sampling experiment conducted in the spring of 1977 revealed no significant differences across dimensions of programming (George Gerbner et.al., Journal of Broadcasting, in Press).

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Data from a ninth fall sample (1977) will be included if it is available when the analysis commences.

(1975 and 1976) one-week samples of programs aired in the early spring of these years. The programs included in these samples were videotaped and subjected to a recording instrument divided into four sections: the program as a whole, the characters, violent actions, and close personal relationships of characters.<sup>22</sup> An outline and brief description of the recording instrument may be found in Appendix II.

The proposed analysis will focus upon two groups of programs -- weekend daytime (children's) programs and prime-time programs. The prime-time programs may also be further divided into programs aired during the family viewing hour (8 to 9 PM) and those aired in the late evening hours (9 to 11 PM). It will use three of the four sections of the recording instrument -- the program, characters, and close personal relationships.

#### The Program

The Data Archive of Cultural Indicators Message System Analysis is designed to facilitate the isolation of programs focusing upon certain issues as well as programs that are populated by certain groups of characters. In this case, we will isolate programs in which the elderly appear. These programs will be analyzed along the following dimensions - program type, format, tone, time, place, setting, violence, medicine and health. We will also look at the themes and aspects of life that are found in these programs. When possible, programs focusing upon old age will be compared with programs that do not have elderly characters.

#### Characters

The description of the characters who populate that world of prime-time and weekend daytime dramatic television programming is an important

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Data on character's close personal relationships is available only from 1973.

ting and weekend daytime dramatic television programming and detailed part of the proposed analysis.

Characters will be divided into four age-related groups -- children and adolescents, young adults, settled adults and the elderly. The four groups will be used so that the image of the elderly can be compared with the image of children and younger adults. This analysis will look at characters in children's programming (weekend daytime) separately from characters in programs broadcast from 8 to 11 PM (prime time). Separate analyses will also be performed for major characters (those who portray roles essential to the plot of the program) and minor<sup>23</sup> characters (all other characters with speaking roles).

This data base consists of 8 types of items -- demographic, occupation, health, home and family, sex and romance, general role ("good-bad", success, happiness), violence, and bi-polar personality traits.<sup>24</sup> These variables will be analyzed using statistical techniques such as contingency analysis and cluster analysis<sup>25</sup>, personality trait profiles, and simple crosstabulation techniques. Special attention will be given to the portrayal of the low-income and minority group aged.

#### Close personal relationships

This part of the analysis will look at the personal relationships in which one (or both) of the partners is elderly. Data were coded for all family and romantic relationships as well as all relationships in which the partners were relatively familiar with each other. The analysis will des-

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<sup>23</sup> Data for minor characters is available on a sub-set of the variables.

<sup>24</sup> The bi-polar personality scales were only coded for major characters.

<sup>25</sup> The analysis will be similar to that used in an earlier analysis of some of this data. Nancy Signorielli (Tedesco), Men and Women in Television Drama: The Use of Two Multivariate Techniques for Isolating Dimensions of Characterization. (A Dissertation in Communications, University of Pennsylvania, 1975).

scribe the type of relationship, the general aspects of the relationship (e.g. beginning and ending state, happiness of partners) and the presence of conflict.

#### Reliability of Variables

An important aspect of the Cultural Indicators Message System Analysis is the assessment of the reliability of each item in the recording instrument. The purpose of reliability measures in this type of analysis is to determine the degree to which the data reflect the properties of material under investigation, rather than contamination of instrument ambiguity or observer bias. The measures used in the assessment of reliability for the Cultural Indicators Message System Analysis are agreement coefficients which indicate the degree to which agreement among independent pairs of observers is above chance.<sup>26</sup> For most of the variables that will be used in the proposed analysis the acceptable agreement coefficient will be .600. However, for certain items the minimum coefficient may have to be reduced to .500 (for example, the personality trait scales). In all cases where the reduced minimum standard must be used, it will be noted.

#### Cultivation Analysis

The Cultural Indicators Project Data Archives also consist of responses to questions about social reality. Each of these questions has a "television answer" -- the way it is in the world of television -- and another different answer, which is usually more typical of reality. These questions are presented to adults as part of national probability or quota surveys, and to children in group tests and interviews. The proposed analysis will use only

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Please see the discussion of reliability on page 23 of this proposal for a full description of the way reliability is assessed for this project.

the adult surveys. The cultivation questions included in these surveys focus upon a variety of topics such as fear and violence, occupations, "mean-world" syndrome, aging, sex-role orientations, and general life-styles.

This part of the secondary analysis of Cultural Indicators data will analyze four samples of adult respondents. Three of these samples were commissioned for or obtained by the Cultural Indicators Project from three survey research organizations: Starch-Hooper (STARCH), The Opinion Research Corporation (ORC), and the National Opinion Research Center (NORC). The fourth sample ((PHILLY)) was a survey conducted by Cultural Indicators Staff and Students at the Annenberg School of Communications of the University of Pennsylvania.

In addition, data from a Harris Poll conducted for the National Council on Aging and funded by the Clark Foundation may be included in this part of the analysis.<sup>27</sup>

#### Starch/Hooper Survey (STARCH)

This survey was commissioned by the Cultural Indicators Project. The data base consists of a quota<sup>28</sup> sample (N=607) interviewed by telephone in four major U.S. cities (Philadelphia, Chicago, Los Angeles and Dallas) in the Spring of 1973 by Starch/Hooper. Responses were collected on a number of cultivation questions focusing upon the following topics -- aging, ethnic groups, factual and statistical "information", justice, sex-roles, occupations, fear and violence. Data were also collected on the following demographic variables -- age, sex, education, parents' education as well as the media-use variables -- newspaper reading, television viewing, daytime serial viewing, news program viewing, news magazine reading and program preferences.

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<sup>27</sup> We recently became aware of this poll and are now in the process of gathering additional information about the survey, consequently the discussion of the proposed analysis is not specific.

<sup>28</sup> From households randomly selected from telephone books, screened for sex and television viewing (less than 2 hours or more than 4 hours).

This data base will be subjected to two types of analysis. First, two questions in the survey that relate to old age -- "the age at which men become old" and "the age at which women become old" will be analyzed. Second, cultivation questions will be analyzed using age as one of the controlling variables. That is, respondents will be divided into three groups -- the young (18-39), middle age (40-59) and the elderly (over 60) -- to see if age is related to television viewing and conceptions of social reality. For example, do elderly respondents (who are heavy or light television viewers) reply to cultivation questions about fear and violence<sup>29</sup> with answers that reflect "reality" or "the television world".

#### Opinion Research Center (ORC)

These data were collected as part of an Opinion Research Center caravan. The data base consists of personal interviews of a national probability<sup>30</sup> sample (N=2052) in May, 1974 by Opinion Research Corporation. Responses were collected on four fear and violence-related cultivation questions. Data on demographic and media use variables were also collected. This data base will be analyzed using age as one of the controlling variables. That is, respondents will be divided into three groups (young, middle age, and elderly) to determine whether or not the relationship between television viewing and conceptions of fear and violence in society are also related to the age of the respondent.

#### National Opinion Research Center (NORC)

The NORC data base consists of personal interviews of a national modified

<sup>29</sup> See, for example, George Gerbner and Larry Gross, "Living with Television: The Violence Profile," Journal of Communication, 1976, 26:2, 172-199, and George Gerbner, Larry Gross, Michael F. Eeey, Marilyn Jackson-Beeck, Suzanne Jeffries-Fox, and Nancy Signorielli, "TV Violence Profile No. 8: The Highlights," Journal of Communication, 1977, 27:2, 171-180.

<sup>30</sup> Stratified by geographic area and cluster at neighborhood level.

probability<sup>31</sup> sample (N=1490) collected in March and April 1975 by the National Opinion Research Center.

The data are from NORC's General Society Survey that provides demographic and media use information as well as questions about life. Some of the topics included in the survey were health, fear, violence, politics, sex-role orientation, family-life and social/familial status. The analysis proposed for this data base is similar to that proposed for ORC. That is, questions (especially those relating to fear, violence and the "mean-world") will be analyzed using age as one of the controlling variables.

#### PHILLY

This data base consists of a probability sample (N=387) of Philadelphia area adults<sup>32</sup> collected by telephone interview in April, 1977 by undergraduate students in a course given at the Annenberg School of Communications, Phila. The data include demographic and media use variables as well as responses to cultivation questions. One question about "old age" was included in the survey -- respondents were asked to estimate the percent of people in the United States who are over 65. This question, as well as cultivation questions relating to fear, violence, and the "mean world," will be analyzed using age as an important controlling variable.

#### Harris Poll on Aging

A fifth secondary analysis of survey data may be included in this part of the proposed research. The Harris study on "The Myth and Reality of Aging in

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<sup>31</sup> Half block quota, half full probability.

<sup>32</sup> Telephone subscribers who chose to publish telephone numbers in the August, 1976 Philadelphia telephone book (white pages).

America,"<sup>33</sup> conducted for the National Council on Aging and funded by the Clark Foundation will be included if the interview schedule contained appropriate questions on media use and notions of social reality.

If appropriate, this data base will be subjected to the type of analysis proposed for the NORC data base.

(2) Development, Pilot Testing and Implementation of a Message System Analysis Recording Instrument focusing upon the portrayal of the elderly, old age and growing old in network Television Drama

This proposal calls Message System Analysis

This proposal calls for the analysis of approximately 250 programs in the Cultural Indicators Project videotape archive that focus on old age. The recording instrument will be pilot tested on 30 of these programs. The principal aspects of methodology are the instrument of analysis, the sample, the training of analysts, the coding procedure, and the assessment of the reliability of the observations.

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Recording Instrument Development: Testing and Implementation

An important part of the proposed research is the development and testing of an appropriate recording instrument. This instrument will consist of variables that can be used to fully describe the image of old age in dramatic television programming. For example, it will include variables to note the presence of certain themes and aspects of life such as sex, violence, love, health, and illness. It will also focus upon the life style of the elderly -- whether or not they live alone, with a spouse, or in a nursing home; their financial situation, physical mobility, etc. The recording instrument will also include variables specifically suited to analyze programs in which

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<sup>33</sup> detailed information is not yet available, however we think that this maybe a useful data base.

nursing homes play an important role.

The instrument will undergo several testing sessions. First, members of the staff will use the recording instrument on 2 or 3 programs. The staff will meet and discuss all problems encountered in the initial testing period. Second, the recording instrument will be pilot tested on a sample of 30 programs. Finally, the full scale analysis will be conducted on all programs in the Cultural Indicators videotape archive that focus on old age and the elderly. The data collected for these programs will be added to the data originally collected as part of the ongoing Cultural Indicators Project Message System Analysis.

#### Coding and Training Procedures

In Message System Analysis coders are trained in a specialized kind of observation. They must reliably make the discriminations required by the recording instrument and record them in a specified form. Coders 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 that will permit interpretation of the common message elements and structures available to a public of diverse viewers.

For the full analysis of this sample, a staff of between 10 and 12 coders will be recruited. The training period will require 1 week of instruction and testing. An introductory session will be devoted to item-by-item discussion of the recording instrument. The trainee group will be subsequently split into randomly assigned coding teams of two each, and all coder-pairs then will view and code 3 selected programs that have been viewed and coded by the staff. Each coder-pair will work independently of all other pairs, and will return a joint coding for each program. In the next general meeting, the entire staff will discuss the difficulties encountered in the 3 program exercise. When these problems have been resolved, the coder-pairs will code an additional 4 programs.

The data generated by the coder-pairs on the 7 training programs will be keypunched and subjected to computerized analysis. On the basis of these results, instructions and variables will be further discussed and if necessary, revised. Moreover, idiosyncratic coder-pairs will be isolated. The coder-pairs who survive this testing process will proceed to analyze the sample of programs.

During both the training and data-collection phases, coder pairs can monitor the assigned videotape of the program as often as necessary. All of the programs will be recorded independently by two separate coder-pairs to provide double-coded data for the reliability analysis.

The final set of data will be compiled from the double-coded data base by randomly selecting one of the two codings for each program. As a last check against deviant coding, and before the final data selection, reliability measures will be computed for each coder-pair. This procedure will help identify problem coder-pairs who may not have been screened out in the training and pre-test phase. In such an instance, the data recorded by the questionable pair will be excluded from the final selection.

#### Assessment of Reliability

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; as a last resort, by eliminating the unsalvageable variable or dismissing the incorrigible coder. Measures of reliability thus serve two functions: a diagnostic tool in the confirmation of the recording process, and as final evaluators of the accuracy of the phenomena's representation in the actual recorded data. The reliability analysis will be of extreme importance in the pilot testing because the results of this analysis will lead to revisions of the recording instrument.

Five computational formulae are currently available for calculating the coefficients 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.<sup>34</sup> Thus, in the case of the binary variable, all formulae yield identical results.<sup>35</sup>

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.

(3) Development and Implementation of Cultivation Analysis focusing upon old age

The final phase of the proposed research will involve the development and implementation of a Cultivation Analysis instrument to determine the notions of old age learned by viewers from watching television.

<sup>34</sup> William A. Scott, "Reliability of Content Analysis: The Case of Nominal Scale coding," Public Opinion Quarterly, 17:3, 321-325, 1955.

<sup>35</sup> 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.

Cultivation Analysis begins with the patterns found in a "world" of television programming (e.g dramatic programming). The common message systems composing that world present a coherent image of life and society as well as an image of certain groups of people. How is this image reflected in the images, expectations, definitions, interpretations, and values held by its audiences? Do people see the world as it is presented in television?

This step of the research will determine what viewers learn about old age from the world of television; that is, findings about the image of the elderly will be turned into questions about conceptions of old age. Each of these questions will have a "television answer" (the way it is in the world of television) and another, different answer (usually the way it really is). For example, we may ask whether older people are more likely to live in nursing homes, in their own dwelling, or with their children. We may also ask if the elderly are more likely to be victimized. Finally, this instrument will include cultivation questions, such as those focusing upon fear, violence, and the "mean world" that have provided interesting data in past analyses. An important part of the proposed research will be concerned with turning findings from the Message System Analysis of dramatic programs focusing upon old age into questions suitable for Cultivation Analysis

The full implementation of the Cultivation Analysis Instrument will involve giving these questions to adults in a specially commissioned quota survey. A quota sample will be used to insure that the sample has a pre-determined percentage (for example 33 percent) of elderly people. Responses of this sample to the questions will be related to age, television exposure, other media habits, and a number of demographic characteristics. The responses of light, medium and heavy television viewers -- with other characteristics held constant -- will indicate what conceptions of social reality the viewing of television tends to cultivate in what groups and to what extent. The analysis will focus speci-

fically upon the response to these questions. We will also be interested in determining whether or not people's perceptions of old age tend to change with age and/or whether or not these perceptions are related to television viewing habits. The results of these cultivation analysis will also be compared with previous findings.

In both Message System and Cultivation Analyses, special attention will be paid to the ways in which low-income, minority and women elderly are portrayed on televisions and in which they and the general public are affected by these portrayals.

This is the general framework in which we propose to carry out the investigation of television's contribution to public conceptions of aging and the aged. In addition to filling a critical gap in understanding the opportunities for and barriers to greater public support for the aged that television entertainment represents, the proposed study will also establish the basis for an organizational-media workshop and for the continuing monitoring of these issues and policies, as well as for the other dissemination and utilization efforts described below.

### III. ORGANIZATION AND MANAGEMENT PLAN

The project will be implemented by three Co-Principal Investigators (see Appendix III for vitae) and Bibliographies of the Investigators). Dr. George Gerbner will have major responsibility for the Message System Analysis phases of the research and Dr. Larry Gross will oversee the research relating to Cultivation Analysis. Dr. Nancy Signorielli will serve as the Project Director (Project Manager) and will be responsible for coordinating the research. She will oversee all data collection, processing and analysis and will supervise the support staff (two graduate student

assistants, an Information Systems Technician, Data Control Clerk and Message System Analysis Coders).

The proposed survey of adults will be conducted by a survey research facility such as the National Opinion Research Center (NORC) or the Opinion Research Center (ORC). This decision will be determined in the second year of the project because the interview schedule and sampling plans must be based upon findings from the preceeding phases of the project.

The final report of the research findings will be written by the Drs. Gerbner, Gross, and Signorielli. The complete Dissemination and Utilization Plans, including the proposed mailings, the press conference, and workshop (see section IV of this proposal) will be developed and implemented by the three co-Principal Investigators. Dr. Signorielli will be the coordinator for this phase of the project.

This project has the support of a proposed Center for Aging at the University of Pennsylvania, Philadelphia, Pennsylvania. Plans for this center are currently being developed by the Office of the Vice President for Health Affairs at the University. Funds for the development of this center are being supplied by an Administration on Aging developmental grant to the School of Medicine and by a gift from Mr. Thomas McCabe, a friend of the University.

Two members of the Steering Committee for the proposed Center for Aging at the University of Pennsylvania, Dr. Vincent Cristofalo (Chairman) and Dr. Sharon Simson (Executive Secretary) have indicated their willingness to work with the Co-Principal Investigators in developing and implementing final plans for the proposed workshop.

The total research support and facilities of the Annenberg School of Communications, a graduate school, and the University of Pennsylvania will be available to assist in this project.

#### IV. DISSEMINATION AND UTILIZATION PLAN

The results of the research will be disseminated by popular and scholarly publication and by direct mailing. The principal precedents to guide that plan are the dissemination of the results of our annual television violence reports and a mailing list (see Appendix IV) composed of AoA Center staff for Aging and those who requested copies of the special issue (Autumn, 1974) of the Journal of Communication (edited by the senior co-principal investigator) which carried a major research symposium on "Myths of Old Age" (see Appendix V).

A press conference coordinated with AoA staff (and, if desired, leading organizations in the field) will initiate press and popular magazine coverage of the results and will announce the forthcoming workshop of organizational representatives, communications researchers, and media (particularly television network) personnel. At the conclusion of the workshop, another press release will announce the agreements reached between workshop participants, and other follow-up research and action plans.

The workshop itself will be held in Philadelphia at the conclusion of the research. It will be confined to an invited group of about 30 participants. Its purpose will be to serve as a prototype for similar workshops in other parts of the country. (A plan and grant application for the additional workshops will be submitted separately.)

The invited participants will be representatives of federal and community organizations (to be selected in cooperation with AoA staff); prominent communications researchers (including the co-principal investigators) on the social and cultural sources of values on aging; and television writers, producers; and network Standards and Practices (Production Code) representatives.

The workshop will consist of four working sessions, attended by all participants. Three of these sessions will be conducted by and devoted to

the specific interests and needs of each of the three types of participants. The first will be conducted by the ~~Co-Principal Investigators~~ for this project and will present and discuss the findings and implications of the research. The second session will be conducted by representatives of federal and community organizations and will explore social and organizational policy objectives with reference to the findings and their implications. The third will be conducted by media representatives and will elaborate the television network and other media policies, constraints, and recommendations.

The fourth and final session will be conducted by a representative from each of the three groups of participants. The final session will work out the areas of agreement (and/or disagreement) that may provide common ground for both organizational and media policies with regard to television and the aged, and make recommendations for further monitoring, workshops, and other follow-up efforts.