CULTURAL INDICATORS

A research project on trends in television content and viewer conceptions of social reality

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In the last few decades, television has become the mainstream of the cultural environment that affects much of what most people think and do. Public perceptions of and responses to issues, policies, people, products, and institutions can no longer be understood without relating them to their most centralized and pervasive source. Long-range exposure to the world of television is that source.

Cultural Indicators is a data bank, research project, and service that relates televised images and messages to conceptions of social reality and to actions based on those conceptions. Cultural Indicators is designed to investigate television's contribution (by itself as well as in combination with other demographic and media use characteristics) to viewers' assumptions about and responses to a large number of issues and topics.

This research began in 1967-68 with a study 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, The White House Office of Telecommunications Policy, the American Medical Association, and other agencies. 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 functions of many aspects of life presented in television drama.

The research consists of two interrelated parts: (1) Message System Analysis monitoring of the world network television drama and (2) Cultivation Analysis determining the conceptions of social reality that television programming tends to cultivate in different groups of viewers. The analyses provide information about the geography, demography, character profiles, and action structure of the world of television, and focus these images and lessons upon specific issues, policies, and topics.

The annual Violence Index and Profile (7, 8, 9, 11) has made an impact upon national policy in television programming. But the Cultural Indicators project is also generating an increasing variety of studies in other areas. Theoretical papers have presented and discussed methodological issues (3, 4, 5, 7). Others examined the importance of applying the Cultural Indicators paradigm to the study of television news (12) and to the assessment of televisions' impact upon children and adolescents (13, 14, 15). One study examined personal and social characteristics of the non-viewers of television (16). Message Analysis data have been used to isolate the image of the elderly (25). Several analyses of cultivation data have revealed that heavy television viewing by school children is consistently and negatively related to IQ and school achievement scores, especially reading comprehension (22, 23, 24). Cultural Indicators researchers have also investigated how children's conceptions of occupations are related to television portrayal of occupations (17) and how television viewing is related to educational aspirations and sexist attitudes among adolescents (14, 24).

Several studies related television viewing to political interest, knowledge, and activity (15, 17).

Current plans call for extending the research in the areas of aging, health, family life, occupational choices, and education for incorporating the analysis

of news and commercials; for conducting the research cross-culturally; and for applying the method to other issues of governmental and corporate interest. In each case, the focus of the investigation is the contribution of television programming to viewer conceptions and actions.

Message System Analysis

Cultural Indicators research thus begins with the monitoring and analysis of the "world" of network television drama. Message System Analysis is a flexible tool for making systematic, reliable, and cumulative observations of program content. The technique permits the identification of many aspects of the television world and the testing of its contribution to viewers' conceptions of the real world.

Message System Analysis focuses on the gross, unambiguous, and commonly understood facts of portrayal. These are the features that can be expected to provide bases for interaction and common assumptions among large and heterogeneous mass publics.

Message System Analysis has been performed on annual samples of prime-time and weekend daytime network dramatic programming since 1967 by trained analysts who observe and code various aspects of television content. By 1978, 1437 programs 4106 major characters, and 10,429 minor characters have been analyzed.

For the analysis of each sample of programs, a staff of between 16 and 20 coders is recruited. After approximately three weeks of training and testing, coders analyze the season's videotaped program sample. During both the training and data-collection phases, coders work in independent pairs and monitor their assigned videotaped programs as often as necessary. All programs in the sample are coded by two separate coder-pairs to provide double-coded data for reliability comparisons. Final measures, computed on the study's entire corpus of double-coded data, determine the acceptability of information for analysis and provide guidelines to its interpretation (20, 21.) All data are stored on the computer for easy retrieval and analysis.

Cultivation Analysis

Cultivation Analysis begins with the patterns found in the "world" of television drama. The message system composing that world presents coherent images of life and society. How are these images reflected in the assumptions and values held by audiences? How are the "lessons" of symbolic behavior applied to real life?

The problem of studying television's "effects" is compounded by the fact that today nearly everyone "lives" to some extent in the world of television. Without control groups of non-viewers it is difficult to isolate television's impact. Experiments do not solve the problem, for they are not comparable to people's day-to-day television viewing. Our approach reflects the hypothesis that heavier viewers of television, those more exposed than lighter viewers to its messages, are more likely to understand social reality in terms of the

"facts of life" they see on television. To investigate this hypothesis, we partition the population and our samples according to television exposure. By contrasting light and heavy viewers, some of the difference television makes in people's conception of social reality can be examined.

Naturally, we are aware that factors other than television viewing may account for some of those differences. Since we have found, as have others, that heavy television viewing is part of a complex syndrome which also includes lower education, lower mobility, lower aspirations, higher anxieties and other characteristics, our analyses are designed with statistical controls for these and other demographic and descriptive variables. These characteristics are held constant when comparing responses of heavy and light viewers. For example, college-educated respondents may answer differently from non-college respondents. Therefore, compare heavy and light viewer responses within the college and non-college groups as well as between them.

Once the "television view" and the "real world" or some other view of selected facts and aspects of social reality have been determined, we construct questions dealing with these facts and aspects of life. Each question has an inferred or objectively determined "television response" reflecting the "television view" of the facts, and a "non-television answer."

Data have been collected from samples diverse in characteristics such as age, location, and institutional affiliation. Within each sample, television viewers' responses are further analyzed in terms of age, education, sex, and other media use and other social and personal characteristic.

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

Continuing and New Directions

The basic research effort will continue to explore the ways in which television cultivates public assumptions about the facts and issues of life, and to refine our understanding of television effects among various groups of viewers. In addition, we shall continue to extend and diversify the research and offer a variety of information services.

- A. The basic research and information service
 - 1. Periodic monitoring of space, time, demographic, personality, action, thematic, and inter-group relationship dimensions of the world of network television drama.
 - 2. Periodic surveys of adult conceptions of social reality related to continuities and changes in program content.

- 3. Special studies of children's television viewing patterns and what they learn from television.
- 4. Continuing analysis of the interaction between television viewing, reading, other media use, educational and social influences, family context, and other variables.

B. The extended research and information service

- 1. News: The development and testing of message analysis recording instruments for television news, including measures similar to those currently applied to dramatic programming. Development of appropriate questions for cultivation analysis focusing upon news content and respondents who do or do not watch the news.
- 2. Commercials: The development and testing of a message analysis recording instrument to analyze commercials, including measures parallel with those applied to drama and news. Similar extension of cultivation analysis.
- 3. Daytime serials, game shows, talk shows: The development of suitable recording instruments and the inclusion of these program types in the annual sample; extension of the Cultivation Analysis to include these types of programs.

C. Multinational cross-cultural comparative studies

Planning meetings with communications researchers of other countries interested in comparative Cultural Indicators were held in England in 1971 and 1976; West Berlin in 1977, and Warsaw, Poland, in 1978. Next, a series of workshops and methodological training sessions will develop common procedures of analysis.

The comparative research will attempt to discover which relationships between television viewing and conceptions of social reality are universal and which are specific to certain programming policies and structures. Crosscultural comparisons will also help all participating countries understand the special characteristics of their own policies and the range of alternatives pursued around the world.

Researchers have attended one or more of the planning meetings and have expressed interest in participating in the cross-cultural project from Australia, Austria, Belgium, Brazil, Canada, Columbia, Denmark, Finland, France, German Federal Republic, Hungary, India, Indonesia, Israel, Italy, Japan, Malaysia, The Netherlands, Nigeria, Norway, Poland, South Africa, Sweden, United Kingdom, USSR, and Yugoslavia.

D. Special topics and issues.

As the Cultural Indicators archive contains the videotapes of the programs included in the annual samples, special topics can be studied in three ways:

(1) making use of the appropriate variables in the computerized data banks; (2) designing special message analysis recording instruments to be used on subsets of videotaped programs; (3) new dimensions of analysis applied to new samples of programs as well as to the videotaped archives.

The list of special topics and issues on which analysis of both content and viewer conceptions and behavior can be focused is practically endless. Almost any social or institutional interest, policy concern, and product or service can find sources of images, concepts, and behavior formation in the Cultural Indicators message system or cultivation analysis. The following areas of special concentration are listed either because such work is under way or because outside or staff interests have put them on the project's "agenda".

- 1. Representation of aging and of interactions between different age groups. What conceptions of aging do such representations cultivate in viewers of different ages and other characteristics? How do old people relate to television?
- 2. Images of the family and their relationship to viewer conceptions of family life. The mediating effect of family viewing context on what children learn from television.
- 3. Sex roles and their relationshps to the development of gender-related ideas and behaviors.
- 4. Racial, ethnic, religious and other group representations and the assumptions they cultivate about minority group characteristics and relationships.
- 5. Health-related images, messages, and practices ranging from nutrition and drug use to medical professions, practitioners, and mental and physical illness.
- 6. Portrayals of law, crime, violence and other aspects of public authority.
- 7. Presentation of other countries and people; issues related to the conduct of foreign policy.
- 8. Portrayals of occupations and their effects on occupational stereotypes and the occupational choices of children.
- 9. Energy, mobility, and transportation as presented on television and as contributing to viewer conceptions on these issues.
- 10. Government and politics; how television portrayals contribute to public conceptions of the political process.
- 11. Images of industry, business, labor, and other institutions and their contributions to the formation of popular conception and policies.

- 12. Education, schools, teachers, students. Representation of the educational enterprise and its effect on popular conceptions of education. The relationship of television viewing to academic achievement.
- 13. Armed forces, war, and other issues related to international (or internal) conflict and national defense.
- 14. Consumer skills and practices. How they are presented on television and how they influence the styles of life and purchasing habits of children and adults.
- 15. Other media and cultural activities. The relationship of television and its content to reading, sports, music, theater, movies, and other recreational and cultural activities.

This is the general framework in which we intend to carry on the basic research and to provide specialized studies and services. We believe that the extended scientific activity and service will fill a critical gap in understanding the common cultural sources of social behavior and will be useful in policy-making of all kinds.

BIBLIOGRAPHY

- 1. Gerbner, George. "Dimensions of Violence in Television Drama." In Robert K. Baker and Sandra J. Ball (Eds.) Violence in the Media Staff report to the National Commission on the Causes and Prevention of Violence U.S. Government Printing Office, 1969.
- 2. Gerbner, George. "Towards 'Cultural Indicators': The Analysis of Mass Mediated Message Systems." AV Communication Review 17, Summer 1969, pp. 137-148. Also in George Gerbner, Ole R. Holsti, Klaus Krippendorff, William H. Paisley, and Philip J. Stone (Eds.) The Analysis of Communication Content. Chapter 5. New York: John Wiley, 1969.
- 3. Gerbner, George, "Violence in Television Drama: Trends and Symbolic Functions." In G.A. Comstock and E.A. Rubinstein (Eds.) <u>Television</u> and Social Behavior, Vol. 1. Content and Control. Washington: U.S. Government Printing Office, 1972.
- 4. Gerbner, George, "Communication and Social Environment." Scientific American, September 1972. Reprinted in Communication: A Scientific American Book San Francisco, CA.: W. H. Freeman and Company, 1972.
- 5. Gerbner, George, "Cultural Indicators: The Third Voice," in Communication Technology and Social Policy, New York: John Wiley, 1973.
- 6. Gerbner, George and Larry Gross, "The Scary World of TV's Heavy Viewer,"

 Psychology Today, April 1976.
- 7. Gerbner, George and Larry Gross, "Living with Television: The Violence Profile." Journal of Communication, Spring 1976.
- Gerbner, George, Larry Gross, Michael Eleey, Marilyn Jackson-Beeck, Suzanne Jeffries-Fox, and Nancy Signorielli. "TV Violence Profile No. 8: The Highlights." Journal of Communication, Spring 1977.
- 9. Gerbner, George, Larry Gross, Michael Eleey, Marilyn Jackson-Beeck, Suzanne Jeffries-Fox, and Nancy Signorielli, "Violence Profile No. 8: Trends in Network Television Drama and Viewer conceptions of Social Reality, 1967-76." Annenberg School of Communications, University of Pennsylvania, March, 1977.
- 10. Gerbner, George, Larry Gross, Michael Eleey, Marilyn Jackson-Beeck, Suzanne Jeffries-Fox, and Nancy Signorielli. "The Gerbner Violence Profile an Analysis of the CBS Report." <u>Journal of Broadcasting</u>, Summer 1977.
- Gerbner, George, Larry Gross, Marilyn Jackson-Beeck, Suzanne Jeffries-Fox, and Nancy Signorielli. "Cultural Indicators: Violence Profile No. 9. <u>Journal of Communication</u>, Summer, 1978.
- 12. Gerbner, George and Nancy Signorielli. "The World of Television News." in Adam and F. Scriebman (Eds.) <u>Television News Archives: A Guide</u>
 to Research. Washington, D.C.: George Washington University, 1978.

- 13. Gross, Larry "Television as a Trojan Horse." School-Media Quarterly, Spring 1977.
- 14. Gross, Larry and Suzanne Jeffries-Fox. "What Do You Want to Be When You Grow Up, Little Girl?" In G. Tuchman, A. K. Daniels, and J. Benet (eds.) Hearth and Home: Images of Women in the Mass Media New York: Oxford, 1978.
- 15. Jackson-Beeck, Marilyn "Interpersonal and Mass Communication in Children's Political Socialization," Journalism Quarterly, Spring 1979 (forthcoming).
- 16. Jackson-Beeck, Marilyn "The Non-Viewers: Who are They?" <u>Journal of</u> Communication, Summer 1977.
- 17. Jackson-Beeck, Marilyn "Television's Impact on Children: An Assessment of Current Research" Paper presented at International Communication Association Conference, Berlin, West Germany, June, 1977.
- 18. Jackson-Beeck, Marilyn "Political Implication of Heavy Television Viewing," Paper presented to Association for Education in Journalism, College Park, Maryland, August 1976.
- 19. Jeffries-Fox, Suzanne and Nancy Signorielli, "Television and Children's Conceptions about Occupations." Paper presented at the Sixth Annual Telecommunications Policy Research Conference, Airlie, Virginia, May 1978.
- 20. Krippendorff, Klaus, "Bivariate Agreement Coefficients for the Reliability of Data." In E. F. Borgatta and G.A. Bohrnstedt (Eds.)

 Sociological Methodology, San Francisco: Jossey-Bass, 1970.
- 21. Krippendorff, Klaus, "A Computer Program for Agreement Analysis of Reliability Data, Version 4." Annenberg School of Communications, University of Pennsylvania, July 1973.
- 22. Morgan, Michael, "Readin', Writin', and Watchin': Pattern of Television Viewing, Aptitude, and Academic Achievement Among Adolescents."
 Unpublished M.A. Thesis, Annenberg School of Communications, University of Pennsylvania, 1977.
- 23. Morgan, Michael and Larry Gross. "Reading, Writing, and Watching: Television Viewing, Aptitude, and Academic Achievement." Annenberg School of Communications, University of Pennsylvania, 1978.
- 24. Morgan, Michael and Nancy Rothschild. "Television and Children at a New York (Private) School." Working paper, Annenberg School of Communications, University of Pennsylvania, 1978.
- 25. Signorielli, Nancy, and George Gerbner, "Images of the Elderly in Prime Time Network Television Drama," Annenberg School of Communications, University of Pennsylvania, 1977.