Cultivation Analysis: an Overview

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I f future historians wanted to know about the common cultural environment of stories and images into which a child was born in the second half of the twentieth century, where would they turn?

How would they describe its action structure, thematic content, and representation of people? How would they trace the ebb and flow of its currents? Pathetic to say, they would find no other source than our own Cultural Indicators database and reports.[1]

Humans are the only species that lives in a world erected by the stories we tell. The story-telling process used to be hand-crafted, home-made, community-inspired. Now it is the end result of a complex manufacturing and marketing process. The situation calls for a new diagnosis and a new prescription. That is what the Cultural Indicators and Cultivation research projects attempted to do.

For the first time in human history, children are born into homes where mass-produced stories can reach them on the average more than seven hours a day. Most waking hours, and often dreams, are filled with these stories. The stories do not come from their families, schools, churches, neighborhoods, and often not even from their native countries, or, in fact, from anyone with anything relevant to tell. They come from small group of distant conglomerates with something to sell.

The cultural environment in which we live becomes the by product of marketing. The historic nexus of state and church is replaced by the new symbiotic relationship of state and television. The 'state' itself is the twin institution of elected public government and selected private corporate government, ruling in economic do-

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mains. Media, its cultural arm, is dominated by the private establishment, despite its use of the public airways.

Giant industries discharge their messages into the mainstream of common consciousness. Channels proliferate and new technologies pervade home and office while mergers and bottom-line pressures shrink creative alternatives and reduce diversity of content.

Broadcasting is the most concentrated, homogenized, and globalized medium. The top U.S. 100 advertisers pay for two-thirds of all network television. Four networks, allied to giant transnational corporations—our private 'Ministry of Culture'—control the bulk of production and distribution, and shape the cultural mainstream. Other interests, religious or educational, minority views, and the potential of any challenge to dominant perspectives, lose ground with every merger.

Formula-driven assembly-line produced programs increasingly dominate the airways. The formulas themselves reflect the structure of power that produces them and function to preserve and enhance that structure of power.

For the longest time in human history, stories were told only face to face. A community was defined by the rituals, mythologies and imageries held in common. All useful knowledge was encapsulated in aphorisms and legends, proverbs and tales, incantations and ceremonies. Writing was rare and holy, forbidden for slaves. Laboriously inscribed manuscripts conferred sacred power to their interpreters, the priests and ministers. State and church ruled in a symbiotic relationship of mutual dependence and tension. State, composed of feudal nobles,

was the economic, military and political order; church its cultural arm.

The industrial revolution changed all that. One of the first machines stamping out standardized artifacts was the printing press. Its product, the book, was a prerequisite for all the other upheavals to come. Printing begins the industrialization of story-telling, arguably the most profound transformation in the humanization process.

When the printing press was hooked up to the steam engine the industrialization of story-telling shifted into high gear. Rapid publication and mass transport created a new form of consciousness: modern mass publics. Publics are loose aggregations of people who share some common consciousness of how things work, what things are, and what ought to be done—but never meet face-to-face. That was never before possible.

Stories could now be sent—often smuggled—across hitherto impenetrable or closely guarded boundaries of time, space and status. The book lifts people from their traditional moorings as the industrial revolution uproots them from their local communities and cultures. They can now get off the land and go to work in far-away ports, factories and continents, and have with them a packet of common consciousness—the book or journal, and later the motion picture (silent at first)—wherever they go.

Publics, created by such publication, are necessary for the formation of individual and group identities in the new urban environment, as the different classes and regional, religious and ethnic groups try to maintain some sense of distinct integrity and also to live together with some degree of cooperation with other groups.

Publics are the basic units of self-government, originally called res-publica or rule by publics, a republic. They make it possible to elect or select representatives to an assembly trying to reconcile diverse interests. Most of our assumptions about human development and political plurality and choice are rooted in the print era.

The second great transformation, the electronic revolution, ushers in the telecommunications era. Its mainstream, television, is superimposed upon and reorganizes print-based culture. Unlike the industrial revolution, the new upheaval does not uproot people from their homes but transports them in their homes.

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Our research project called Cultural Indicators has tracked the central streams of television's dramatic content since 1967, and has explored the consequences of growing up and living with television since 1974.

Television in Society

Television is a centralized system of story-telling. Its drama, commercials, news and other programs bring a relatively coherent system of images and messages into every home. That system cultivates from infancy the predispositions and preferences that used to be acquired from other 'primary' sources and that are so important in research on other media.

Transcending historic barriers of literacy and mobility, television has become the primary common source of socialization and everyday information (mostly in the form of entertainment) of otherwise heterogeneous populations. Many of those who now live with television have never before been part of a shared national culture. Television provides, perhaps for the first time since pre-industrial religion, a daily ritual that elites share with many other publics. The heart of the analogy of television and religion, and the similarity of their social functions, lies in the continual repetition of patterns (myths, ideologies, 'facts', relationships, and so on) which serve to define the world and legitimize the social order.

Television is different from other media also in its centralized mass-production of a coherent set of images and messages produced for total populations, and in its relatively non-selective, almost ritualistic, use by most viewers. Exposure to the total pattern rather than only to specific genres or programs is what accounts for the historically new and distinct consequences of living with television: the cultivation of shared conceptions of reality among otherwise diverse publics.

Compared to other media, television provides a relatively restricted set of choices for a virtually unrestricted variety of interests and publics. Most of its programs are by commercial necessity designed to be watched by large and heterogeneous audiences in a relatively non-selective fashion. Surveys show that the general amount of viewing follows the style of life of the viewer. The audience is always the group available at a certain time of the day, the week, and the season. Viewing decisions depend more on the clock than on the program. The number and variety of choices available to view when most viewers are available to watch is also limited by the fact that many programs designed for the same broad audience tend to be similar in their basic make-up and appeal

In the typical U.S. home the television set is in use for over seven hours a day. Actual viewing by persons over two years old averages more than three hours a day.

And the more people watch the less selective they can be. Therefore, the most frequently recurring features of television that cut across all types of programming are inescapable for the regular viewer.

Various technological developments such as cable, VCR, and the internet have contributed to a significant erosion in audience share (and revenue) of the major broadcasting networks and have altered the marketing and distribution of movies. However, there is no evidence that proliferation of channels has led to substantially greater diversity of content. On the contrary, rapid concentration and vertical integration in the media industries, the absorption of most publishing houses by electronic conglomerates, the growing practice of producing the same material for several media markets, and the habit of time-shifting by VCR users (recording favorite network programs to play back more often and at more convenient times), suggest that the diversity of what is actually viewed may even have decreased.

Given the tight links among the various industries involved in the production and distribution of electronic media content, and the fact that most of them are trying to attract the largest and most heterogeneous audience, the most popular program materials present consistent and complementary messages, often reproducing what has already proven to be profitable. Most of the variety we observe comes from novelty effects of styles, stars, and plots rather than from changes in program structure and perspective.

What is most likely to cultivate stable and common conceptions of reality is, therefore, the overall pattern of programming to which total communities are regularly exposed over long periods of time. That is the pattern of settings, casting, social typing, actions, and related outcomes that cuts across program types and viewing modes and defines the world of television. And that is the pattern observed, coded, recorded in the Cultural Indicators project.

Cultural-Indicators is historically grounded, theoretically guided, and empirically supported. (Gerbner, 1969, 1970, 1972a). Although most early efforts focused primarily on the nature and functions of television violence, the Cultural Indicators project was broadly conceived from the outset and took into account a wider range of topics, issues, and concerns We have investigated the extent to which television viewing contributes to audience conceptions and actions in areas such as gender, minority and age-role stereotypes, health, science, the family, educational achievement and aspirations, politics, religion, and other topics.

The Cultural Indicators approach involves a three-pronged research strategy. (For a more detailed description see Gerbner, 1973.) The first prong, called institutional process analysis, is designed to investigate the formation of policies directing the massive flow of media messages. (For some examples see Gerbner 1972b, 1988.) More directly relevant to our present focus are the other two prongs we call message system analysis and cultivation analysis. Both relate to—and help develop—theories about the most subtle and widespread impacts of television.

In the second prong, we have since 1967 recorded annual week-long samples of U.S. network television drama (and samples in other cooperating countries, whenever possible) and subjected these systems of messages to content analysis in order to reliably delineate selected features and trends in the world television presents to its viewers. [2] We believe that the most pervasive patterns common to many different types of programs but characteristic of the system of programming hold the potential lessons television cultivates. We use these overarching patterns of content as a source of questions for the third prong, cultivation analysis.

In the third prong, we examine the responses given to questions about social reality among those with varying amounts of exposure to the world of television. (Non-viewers are too few and demographically too scattered for serious research purposes; Jackson-Beeck, 1977.) We want to determine whether those who spend more time with television are more likely to answer these questions in ways that reflect the potential lessons of the television world (give the 'television answer') than are those who watch less television but are otherwise comparable (in terms of important demographic characteristics) to the heavy viewers.

We have used the concept of 'cultivation' to describe the independent contributions television viewing makes to viewer conceptions of social reality. The 'cultivation differential' is the margin of difference in conceptions of reality between light and heavy viewers in the same demographic subgroups.

Our use of the term 'cultivation' for television's contribution to conceptions of social reality is not just another word for 'effects'. Nor does it necessarily imply a one-way, monolithic process. The influences of a pervasive medium upon the composition and structure of the symbolic environment are subtle, complex, and intermingled with other influences. This perspective, therefore, assumes an interaction between the medium and its publics.

Thus, television neither simply 'creates' nor 'reflects' images, opinions, and beliefs. Rather, it is an integral aspect of a dynamic process. Institutional needs and objectives influence the creation and distribution of mass-produced messages which create, fit into, exploit,

and sustain the needs, values and ideologies of mass publics. These publics, in turn, acquire distinct identities as publics partly through exposure to the ongoing flow of messages.

The question of 'which comes first' is misleading and irrelevant. People are born into a symbolic environment with television as its mainstream. Children begin viewing several years before they begin reading, and well before they can even talk. Television viewing both shapes and is a stable part of lifestyles and outlooks. It links the individual to a larger if synthetic world, a world of television's own making.

When we talk about the 'independent contribution' of television viewing, we mean that the development (in some) and maintenance (in others) of some set of outlooks or beliefs can be traced to steady, cumulative exposure to the world of television. Our longitudinal studies of adolescents (Gerbner, et al., 1980a; Morgan, 1982, 1987; Morgan, et al., 1990a) show that television can exert an independent influence on attitudes and behaviors over time, but that belief structures and concrete practices of daily life can also influence subsequent viewing.

The point is that cultivation is not conceived as a unidirectional but rather more like a gravitational process. The angle and direction of the 'pull' depends on where groups of viewers and their styles of life are with reference to the line of gravity, the 'mainstream' of the world of television. Each group may strain in a different direction, but all groups are affected by the same central current. Cultivation is thus part of a continual, dynamic, ongoing process of interaction among messages and contexts. This holds even though (and in a sense because) the hallmark of the process, once television is established as the main cultural arm of a stable society, is either relative stability or only slow change. A radical change of social relations may, of course, lead to a change in the system of messages and consequently to the cultivation of new and different perspectives.

As successive generations grow up with television's version of the world, the former and more traditional distinctions established before the coming of television, and still maintained to some extent among light viewers, become blurred. Cultivation implies the steady entrenchment of mainstream orientations for most viewers. That process of apparent convergence of outlooks we call 'mainstreaming.'

Cultivation analysis begins with message system analysis identifying the most recurrent, stable, and overarching patterns of television content. These are the consistent images, portrayals, and values that cut across most types of programs and are virtually inescapable for regular (and especially the heavy) viewers. They are the aggregate messages embedded in television as a system rather than in specific programs, types, or genres.

We must emphasize again that testing 'cultivation' on the basis of program preferences, short run exposures, or claims of program changes or diversity (all of which have been tried as 'replications') may illuminate some media effects but does not address fundamental assumptions of cultivation theory. That is that only repetitive, long-range, and consistent exposure to patterns common to most programming, such as casting, social typing, and the 'fate' of different social types, can be expected to cultivate stable and widely-shared images of life and society.

Methods of Cultivation Analysis

There are many critical discrepancies between the world and the 'world as portrayed on television.' Findings from systematic analyses of television's message systems are used to formulate questions about the potential 'lessons' of viewing concerning people's conceptions of social reality. Some of the questions are semi-projective, some use a forced-error format, and other simply measure beliefs, opinions, attitudes, or behaviors. (None asks respondents' views about television itself.)

Using standard techniques of survey methodology, the questions are posed to samples (national probability, regional, convenience) of adults, adolescents, or children. Secondary analyses of large scale national surveys (for example, the National Opinion Research Center's General Social Surveys) have often been used when they include questions that relate to potential 'lessons' of the television world and viewing data are available for the respondents.

Television viewing is usually assessed by multiple indicators of the amount of time respondents watch television on an 'average day.' Since the amount of viewing is used in relative terms, the determination of what constitutes 'light,' 'medium,' and 'heavy' viewing is made on a sample-by-sample basis, using as close to an even three-way split of hours of daily television viewing as possible. What is important is that there should be significant relative differences in viewing levels, not the actual or specific amount of viewing. The heaviest viewers of any sample of respondents form the population on which cultivation can be tested.[3]

The observable evidence of cultivation is likely to be modest in terms absolute size. Even light viewers may be watching several hours of television a day and of course live in the same general culture as heavy viewers. Therefore, the discovery of a systematic pattern of even small but pervasive differences between light and heavy viewers may be of far-reaching consequence. It takes but a few degrees shift in the average temperature to have an

ice age or global warming. A range of 3 to 15 per cent margins (typical of our 'cultivation differentials') in a large and otherwise stable field often signals a landslide, a market takeover, or an epidemic, and it certainly tips the scale of any closely balanced choice, vote, or other decision. A slight but pervasive (e.g., generational) shift in the cultivation of common perspectives may alter the cultural climate and upset the balance of social and political decision-making without necessarily changing observable behavior. A single percentage point ratings difference in a large market is worth many millions of dollars in advertising revenue—as the networks know only too well.

Variations in Cultivation

We have noted that cultivation is not a unidirectional flow of influence from television to audience, but part of a continual, dynamic, ongoing process of interaction among messages and contexts. In many cases, those who watch more television (the heavy viewers) are more likely—in all or most subgroups—to give the 'television answers.' But often the patterns are more complex.

Cultivation is both dependent on and a manifestation of the extent to which television's imagery dominates viewers' sources of information. For example, personal interaction makes a difference. Parental co-viewing patterns and orientations towards television can either increase (Gross and Morgan, 1985) or decrease (Rothschild and Morgan, 1987) cultivation among adolescents. Also, children who are more integrated into cohesive peer or family groups are more resistant to cultivation (Rothschild, 1984).

Direct experience also plays a role. The relationship between amount of viewing and fear of crime is strongest among those who live in high crime urban areas. This is a phenomenon we have called 'resonance,' in which everyday reality and television provide a 'double dose' of messages that 'resonate' and amplify cultivation. The relationships between amount of viewing and the tendency to hold exaggerated perceptions of violence are also more pronounced within those real-world demographic subgroups (e.g., minorities) whose fictional counterparts are relatively more frequently victimized on television (Morgan, 1983).

There are many factors and processes that produce systematic and theoretically meaningful variations in cultivation patterns. One process, however, stands out, both as an indicator of differential vulnerability and as a general, consistent pattern representing one of the most profound consequences of living with television. That is the process of mainstreaming.

Most cultures consist of many diverse currents. But there is typically a dominant set of attitudes, beliefs, values, and practices. This dominant current is not simply the sum total of all the cross-currents and sub-currents. Rather, it is the most general, functional and stable mainstream, representing the broadest dimensions of shared meanings and assumptions. It is that which ultimately defines all the other cross-currents and sub-currents, including what Williams (1977) called 'residual and emergent strains.' Television's central role in our society makes it the primary channel of the mainstream of our culture.

This mainstream can be thought of as a relative commonality of outlooks and values that heavy exposure to the television world tends to cultivate. 'Mainstreaming' means that heavy viewing may absorb or override differences in perspectives and behavior which ordinarily stem from other factors and influences. In other words, differences found in the responses of different groups of viewers, differences that usually are associated with the varied cultural, social, and political characteristics of these groups, are diminished in the responses of heavy viewers in these same groups.

As a process, mainstreaming represents the theoretical elaboration and empirical verification of television's cultivation of common perspectives. It represents a relative homogenization, an absorption of divergent views, and an apparent convergence of disparate outlooks upon the overarching patterns of the television world.

The Findings of Cultivation Analysis

Clear-cut divergences between symbolic reality and independently observable ('objective') reality provide convenient tests of the extent to which television's versions of 'the facts' are incorporated or absorbed into what heavy viewers take for granted about the world. For example, we found that television drama tends to sharply underrepresent older people. While those over 65 constitute the fastest growing segment of the real world population in the U.S., heavy viewers were more likely to feel that the elderly are a 'vanishing breed'—that compared to 20 years ago there are fewer of them, that they are in worse health, and that they don't live as long—all contrary to fact (Gerbner, et al., 1980b).

As another example, consider how likely television characters are to encounter violence compared to the rest of us. Well over half of all major characters on television are involved each week in some kind of violent action. While FBI statistics have clear limitations, they indicate that in any one year less than one per cent of people in the U.S. are victims of criminal violence. We have found considerable support for the proposition that heavy exposure to the world of television cultivates

exaggerated perceptions of the number of people involved in violence in any given week (Gerbner, et al., 1979, 1980a), as well as numerous other inaccurate beliefs about crime and law enforcement.

The 'facts' of the television world are evidently learned quite well, whether or not viewers profess a belief in what they see on television or claim to be able to distinguish between factual and fictional presentations. (In fact, most of what we know, or think we know, is a mixture of all the stories we have absorbed. 'Factual,' which may be highly selective, and 'fictional,' which may be highly realistic, are more questions of style than function within a total framework of knowledge.) The repetitive 'lessons' we learn from television, beginning with infancy, are likely to become the basis for a broader world view, making television a significant source of general values, ideologies and perspectives as well as specific assumptions, beliefs, and images. Hawkins and Pingree (1982) called this the cultivation of 'value systems.' (See also Hawkins and Pingree, 1990.)

One example of this is what we have called the 'mean world' syndrome. Our message data say little directly about either the selfishness or altruism of people, and there are certainly no real world statistics about the extent to which people can be trusted. Yet, we have found that long-term exposure to television, in which frequent violence is virtually inescapable, tends to cultivate the image of a relatively mean and dangerous world. Responses of heavier compared to matching groups of lighter viewer suggest the conception of reality in which greater protection is needed, most people 'cannot be trusted,' and most people are 'just looking out for themselves' (Gerbner et al., 1980a; Signorielli, 1990a).

The Mean World Index, composed of violence-related items, also illustrates the mainstreaming implications of viewing (Signorielli, 1990a). For example, combining data from the 1980, 1983, and 1986 General Social Surveys, heavy and light viewers who have not been to college are equally likely to score high on the Mean World Index: 53% of both the heavy and light viewers agree with two or three of the items. However, among those who have had some college education, television viewing makes a considerable difference: 28% of the light viewers compared to 43% of the heavy viewers in this subgroup have a high score on the Mean World Index. There is thus a 25 percentage point difference between the two subgroups of light viewers but only a 10 point spread between the two subgroups of heavy viewers. The heavy viewers of otherwise different groups are both in the 'television mainstream.'

Another example of extrapolated assumptions relates to the image of women. The dominant majority status of men on television does not mean that heavy viewers ignore daily experience and underestimate the number of women in society. But underrepresentation in the world of television means a relatively narrow (and thus more stereotyped) range of roles and activities. Most groups of heavy viewers—with other characteristics held constant—score higher on a 'sexism scale' using data from the NORC General Social Surveys (Signorielli, 1989).

Several other studies have examined assumptions relating to gender-roles in samples of children and adolescents. Morgan (1982) found that television cultivated such notions as 'women are happiest at home raising children' and 'men are born with more ambition than women.' Rothschild (1984) found that 3rd and 5th grade children who watched more television were more likely to stereotype both gender-related activities (e.g., cooking, playing sports) and gender-related qualities (e.g., warmth, independence), along traditional gender-role lines. While viewing seems to cultivate adolescents' and children's attitudes about gender-related chores, viewing was not related to actually doing these chores (Morgan, 1987; Signorielli and Lears, 1991).

Other studies have dealt with assumptions about marriage and work. Signorielli (1990b) found that television seems to cultivate rather realistic views about marriage but seemingly contradictory views about work. Heavy viewing adolescents were more likely to want high status jobs that would give them a chance to earn a lot of money but also wanted to have their jobs be relatively easy with long vacations and time to do other things.

Other extrapolations from content patterns involve political views. For example, we have argued that as television seeks large and heterogeneous audiences, its messages are designed to disturb as few as possible. Therefore they tend to 'balance' opposing perspectives, and to steer a 'middle course' along the supposedly non-ideological mainstream. We have found that heavy viewers are substantially more likely to label themselves as being 'moderate' rather than either 'liberal' or 'conservative' (see Gerbner, et al., 1982, 1984).

We have observed this finding in many years of the General Social Survey data. GSS data from 1990 reveal this pattern once again., Heavy viewers in all subgroups tend to see themselves as 'moderate' and avoid saying they are either 'liberal' or 'conservative'. The percent choosing the 'moderate' label is again substantially higher among heavy viewers, regardless of party; and heavy viewing Democrats are less likely to say they are 'liberal,' while heavy viewing Republicans are less likely to call themselves 'conservative.' The general pattern shown in these data has appeared every year since 1975.

Yet, looking at the actual positions taken on a number of political issues shows that the mainstream does not

mean the 'middle of the road.' When we analyzed responses to questions in the NORC General Social Surveys about attitudes and opinions on such topics as racial segregation, homosexuality, abortion, minority rights, and other issues which have traditionally divided liberals and conservatives, we found such division mostly among those who watch little television. Overall, self-styled moderates are much closer to conservatives than they are to liberals. Among heavy viewers, liberals and conservatives are closer to each other than among light viewers. We have also noted (Gerbner et al., 1982, 1984) that while mainstreaming bends toward the right on political issues, it leans towards a populist stance on economic issues (e.g., demanding more social services but lower taxes), reflecting the influence of a marketing orientation and setting up potential conflicts of demands and expectations.

Implications of cultivation for foreign policy were reflected in a study of attitudes toward the war in the Persian Gulf (Lewis, Jhally, and Morgan, 1991). Heavy television viewers were more familiar with the military terminology used and more supportive of the war but less informed about issues and the Middle East in general. Overall amount of viewing was far more important than specific exposure to news.

International Cultivation Analysis

Cultivation analysis is well suited to multinational and cross-cultural comparative study (Gerbner, 1977, 1989; Morgan, 1990). In fact, such study is the best test of system-wide similarities and differences across national boundaries, and of the actual significance of national cultural policies.

Every country's television system reflects the historical, political, social, economic, and cultural contexts within which it has developed (Gerbner, 1958, 1969). Although U.S. films and television are a significant presence on the screens of most countries (Varis, 1984), they combine with local and other productions to compose synthetic "worlds" that are culture-specific. Other media systems and policies may or may not project images and portrayals that are as stable, coherent, and homogeneous as those of U.S. media (as, for example, we have found, surprisingly, in the Soviet Union, as we will note below). Therefore, they may or may not lend themselves to the type of cultivation and mainstreaming we find in the U.S. (see Gerbner, 1990; Morgan, 1990; Tamborini and Choi, 1990).

International work in cultivation analysis attempts to answer the question whether the medium or the system is the message. It reveals the extent to which, and the ways in which, each message system contributes to conceptions of social reality congruent with its most stable and recurrent messages and images. Of course, given the range of variations in susceptibility to cultivation even within the U.S., there is no reason to assume that cultivation patterns will be identical or invariant across cultures.

Pingree and Hawkins (1981) found that exposure to U.S. programs (especially crime and adventure) was significantly related to Australian students' scores on 'Mean World' and 'Violence in Society' indices concerning Australia, but not the U.S. Viewing Australian programs was unrelated to these conceptions, but those who watched more U.S. programs were more likely to see Australia as dangerous and mean. Weimann's (1984) study of high school and college students in Israel found that heavy viewers had an idealized, 'rosier' image of the standard of living in the U.S.

In England, Wober (1978) found little support for cultivation in terms of images of violence. (See also Wober, 1984, 1990; Gunter, 1987; Wober and Gunter, 1988; Gunter and Furnham, 1984). But there was little violence in British programs, and U.S. programs only made up about 15 percent of British screen time. Piepe, et al. (1990) found evidence of political 'homogenization' (mainstreaming) in Britain that was highly congruent with U.S. findings (Gerbner, et al., 1982), as did Morgan and Shanahan (1991) in Argentina.

In the Netherlands, Bouwman (1984) found weak associations between amount of viewing and perceptions of violence, victimization, and mistrust. But the findings reveal the importance of cultural context in comparative cultivation research. Content analyses showed a good deal of similarity between U.S. and Dutch television (Bouwman and Stappers, 1984; Bouwman and Signorielli, 1985) and much programming was imported from the U.S. Yet, it was found that both light and heavy viewers see about equal amounts of fictional entertainment, but heavy viewers see more 'informational' programs, a situation quite different from that of the U.S. (See also Bouwman, 1982, 1983, 1987; Bouwman, et al., 1987; Stappers, 1984.)

Cultivation analyses about conceptions of violence, sex-roles, political orientations, 'traditional' values, social stereotypes, and other topics have been conducted in numerous other countries, including Sweden (Hedinsson and Windahl, 1984; Reimer and Rosengren, 1990), Argentina (Morgan and Shanahan, 1991), the Philippines (Tan et al., 1987), Taiwan and Mexico (Tan, et al., 1986), Japan (Saito, 1991), and Thailand (Tan and Suarchavarat, 1988). These studies show the complex ways in which the viewing of local or imported programming can interact with distinct cultural contexts. For example, in Korea, Kang and Morgan (1988) found that exposure to U.S.

television was associated with more 'liberal' perspectives about gender-roles and family values among females. At the same time, more viewing of U.S. television among Korean male students correlated with greater hostility towards the U.S. and protectiveness towards Korean culture, suggesting a 'backlash' of nationalism among the more politicized college students.

Most of these studies examined single countries. Comparative cross-cultural research typically requires complex joint development and collaboration. It takes longer, costs more, and is more difficult to fund. Nevertheless, recent research has begun to emphasize the comparative aspects of cultivation analysis. Morgan and Shanahan, in press analyzed adolescents in Taiwan and Argentina. In Argentina, where television is supported by commercials and features many U.S. programs, heavy viewing cultivates traditional gender roles and authoritarianism. In Taiwan, where media are more state-controlled, with fewer U.S. imports, and where overall viewing is much lighter, cultivation was much less apparent. Also, Morgan (1990) compared the cultivation of sex-role stereotypes in five different countries.

Large-scale comparative cultivation analyses involving many countries were underway or planned in the early 1990s. One of the first to be concluded, a study of U.S. and Soviet television conducted in 1989 and 1990, found that television plays a different role in the two countries. In the U.S., but not in the Soviet Union, television heightens anxieties about neighborhood safety (including comparisons of light and heavy viewers in the same types of neighborhoods), perhaps as a result of the much lower frequency of violence on Soviet television. In both countries, but especially in the Soviet Union, the more people watch television the more they are likely to say that housework is primarily the responsibility of the woman. General satisfaction with life is consistently lower among heavy than among light television viewers in the U.S. but not in the Soviet Union (where it is relatively low for everyone).

Both U.S. and Soviet television systems reduce social and economic differences in attitudes, but this is especially so in the U.S. where such differences are greater. Lacking regular prime-time dramatic series and relying more on movies, theater, documentaries, and the classics, Soviet television may, in fact, present a more diversified dramatic fare than U.S. television. At any rate, television viewing seems to have greater mainstreaming consequences in the U.S. than in the Soviet Union. The availability of different cultural and language programming in the different republics of the USSR may also contribute to the relative diversity of Soviet television—and to the centrifugal forces tearing the Union apart.

In sum, in countries in which television's portrayals

are less repetitive and homogeneous than in the U.S., the results of cultivation analysis also tend to be less predictable and consistent. The extent to which cultivation will occur in a given country will also depend on various structural factors, such as the number of channels available, overall amount of broadcasting time, and amount of time audiences spend viewing. But it will especially depend on the amount of diversity in the available content, which is not necessarily related to the number of channels. A single channel with a diverse and balanced program structure can foster (and, in fact, compel) more diversified viewing, than many channels competing for the same audience, using similar appeals, and lending themselves to viewer selection of the same 'preferences' most of the time.

Different media systems differ along all these dimensions, and complex interactions among these elements may account for substantial cross-cultural variations in cultivation. Imported U.S. programs can augment, diminish or be irrelevant to these dynamics. The key questions are: (1) how important is television in the culture, and (2) how consistent and coherent is the total system of its messages? The more important, consistent, and coherent the more cultivation can be expected.

Conclusions

Television pervades the symbolic environment. Cultivation analysis focuses on the consequences of exposure to its recurrent patterns of stories, images, and messages. Our theories of the cultivation process attempt to understand and explain the dynamics of television as the distinctive and dominant cultural force of our age.

Our explorations and formulations have been challenged, enriched, confirmed, and extended by studies of numerous independent investigators in the United States and abroad, and are still evolving especially as they are being applied in more and more countries.

Cultivation analysis is not a substitute for but a complement to traditional approaches to media effects. Traditional research is concerned with change rather than stability and with processes more applicable to media that enter a person's life at later stages (with mobility, literacy, etc.) and more selectively.

Neither the 'before and after exposure' model, nor the notion of 'predispositions' as intervening variables, so important in traditional effects studies, apply in the context of cultivation analysis. Television enters life in infancy; there is no 'before exposure' condition. Television plays a role in the formation of those very 'predispositions' that later intervene (and often resist) other influences and attempts at persuasion.

Cultivation analysis concentrates on the enduring

and common consequences of growing up and living with television. Those are the stable, resistant, and widely shared assumptions, images, and conceptions expressing the institutional characteristics and interests of the medium itself.

Television has become the common symbolic environment that interacts with most of the things

we think and do. Exploring its dynamics can help develop an understanding of the forces of social cohesion, cultural dependence and resistance to change, as well as the requirements of developing alternatives and independence essential for self- direction and self-government in the television age.

FOOTNOTES

1. The Cultural Indicators Project began in 1967-1968 with a study for the National Commission on the Causes and Prevention of Violence. It continued under the sponsorships of the U.S. 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, the U.S. Administration on Aging, and the National Science Foundation. Cross-cultural comparative extensions of this work, involving long-planned international research coordination and cooperation, began in 1987 under a grant by the W. Alton Jones Foundation, and has continued with the support of the International Research and Exchanges Board (IREX), the Carter Center of Emory University, the Hoso Bunka Foundation of Japan, the Finnish Broadcasting Company,

the Hungarian Institute for Public Opinion Research, Moscow State University, the National Center for Public Opinion Research of the USSR, and the Universities of Pennsylvania, Massachusetts, and Delaware.

2. The message system database accumulated detailed coded observations of over 26,000 characters and over 2,200 programs during the first two decades of its existence.

3. In all analyses we use a number of demographic variables as controls. These are applied both separately and simultaneously. Included are gender, age, race, education, income, and political self-designation (liberal, moderate, conservative). Where applicable, other controls, such as urban-rural residence, newspaper reading, and party affiliation are also used.

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