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Growing Up with Television: Cultivation Processes

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Television is the source of the most broadly shared images and messages in history. It is the mainstream of the common symbolic environment into which our children are born and in which we all live out our lives. Even though new forms of media seem to sprout up weekly, television's mass ritual shows no signs of weakening, as its consequences are increasingly felt around the globe.

Our research project, Cultural Indicators, is designed to study television policies, programs, and impacts. Begun in 1967, Cultural Indicators research tracks the central streams of television's prime-time and weekend-daytime dramatic content and explores the consequences of growing up and living in a cultural environment dominated by television. The project has accumulated a large database that we have used to develop and refine the theoretical approach and the research strategy we call Cultivation Analysis, which focuses specifically on television's contributions to

viewers' conceptions of social reality. In this chapter, we summarize and illustrate our theory of the dynamics of the cultivation process, both in the United States and around the world. This chapter updates and expands material presented in earlier editions of this book (Gerbner, Gross, Morgan, & Signorielli, 1986; 1994; for more detailed treatments, see Signorielli & Morgan, 1990; Shanahan & Morgan, 1999).

TELEVISION IN SOCIETY

Television is a centralized system of storytelling. 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 (usually cloaked in the form of entertainment) of otherwise heterogeneous populations. We have now reached an unprecedented juncture at which television brings virtually everyone into a shared national culture. Television provides, perhaps for the first time since preindustrial religion, a daily ritual that elites share with many other publics. As with religion, the social function of television lies in the continual repetition of stories (myths, "facts," lessons, and so on) that serve to define the world and legitimize a particular social order.

Television is different from earlier media in its ever-centralizing mass production of a coherent set of images and messages produced for large and diverse populations and in its relatively nonselective, almost ritualistic, use by most viewers. Programs that seem to be intended for very different market segments are cut from the same mold; when surface-level differences are wiped away, what remains are often surprisingly similar and complementary visions of life and society, consistent ideologies, and stable accounts of the "facts" of life. Exposure to the total pattern rather than to specific genres or programs is therefore what accounts for the historically distinct consequences of living with television: the cultivation of shared conceptions of reality among otherwise diverse publics.

In saying this, we do not minimize the importance of specific programs, selective attention and perception, specifically targeted communications, individual and group differences, and research on individual attitude and behavior change. But giving primary attention to those aspects and terms of traditional media effects research risks losing sight of what is most distinctive and significant about television as the common storyteller of our age.

Compared to other media, television provides a relatively restricted set of choices for a virtually unrestricted variety of interests and publics. Even with the expansion of cable and satellite channels serving ever-narrower *niche* audiences, most television programs are by commercial necessity designed to be watched by large and heterogeneous audiences in a relatively nonselective fashion. Moreover, the general amount of viewing follows the lifestyle of the viewer. The audience is always the group available at a certain time of the day, week, and 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 makeup and appeal (Signorielli, 1986).

In the typical U.S. home, the television set is in use for about seven hours a day. The more people watch, the less selective they can be (Sun, 1989). The most frequently recurring features of television cut across all types of programming and are inescapable for the regular viewer (Signorielli, 1986). Researchers who attribute findings to news viewing or preference for action programs and so forth overlook the fact that most of those who watch more news or action programs watch more of all types of programs, and that, in any case, many different types of programs, including news, share similar important features of storytelling.

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. Viewers are born into that symbolic world and cannot avoid exposure to its recurrent patterns, usually many times a day. This is not to claim that any individual program, type of program, or channel (e.g., family programs, talk shows, sports networks, cooking channels, news channels, violent films, and so on) might not have some "effects" of some kind or another; rather, it is to emphasize that what we call "cultivation analysis" focuses on the consequences of long-term exposure to the entire *system* of messages, in the aggregate.

CULTURAL INDICATORS

The Cultural Indicators project is historically grounded, theoretically guided, and empirically supported (Gerbner, 1969, 1970, 1972a). Although most early studies focused on the nature and functions of television violence, the project was broadly conceived from the outset. Even violence

was found to be primarily a demonstration of power in the world of television, with serious implications for social control and for the confirmation and perpetuation of minority status (Gerbner, Gross, Signorielli, Morgan, & Jackson-Beeck, 1979; Morgan, 1983). As it developed, the project continued to take into account a wider range of topics, issues, and concerns (Gerbner & Gross, 1976). 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, the environment, and numerous other topics, many of which have also been examined in a variety of cross-cultural comparative contexts.[1]

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 and systematization 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."

Message system analysis involves the systematic examination of week-long annual samples of network television drama, in order to reliably delineate selected features and trends in the world that television presents to its viewers. These analyses began in 1967 and have continued under various auspices until today.[2] In recent years, cable programming and additional genres have been added into the analysis. We believe that the most pervasive patterns common to many different types of programs but characteristic of the system of programming as a whole hold the potential lessons television cultivates.

In cultivation analysis, we examine the responses given to questions about social reality among those with varying amounts of exposure to the

[1]The Cultural Indicators Project began in 1967–1968 with a study for the National Commission on the Causes and Prevention of Violence. It has 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, the National Science Foundation, the W. Alton Jones Foundation, 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, the Robert Wood Johnson Foundation, the Screen Actors Guild, Cornell University, and the Universities of Pennsylvania, Massachusetts, and Delaware.

[2]The most recent sample is from November 2000. To date, the message system database has accumulated detailed coded observations of over 46,000 major and minor characters and over 2,400 programs. A complementary database at the University of Delaware began in 1993 and contains observations for 1,200 programs and 4,600 major and supporting characters.

world of television. We want to determine whether those who spend more time with television are more likely to perceive social reality in ways that reflect the potential lessons of the television world (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 use the concept of "cultivation" to describe the independent contributions television viewing makes to viewer conceptions of social reality. The most general hypothesis of cultivation analysis is that those who spend more time "living" in the world of television are more likely to see the "real world" in terms of the images, values, portrayals, and ideologies that emerge through the lens of television. The "cultivation differential" is the margin of difference in conceptions of reality between light and heavy viewers in the same demographic subgroups. It represents the difference television viewing makes to some outlook or belief, in dynamic interaction with other factors and processes. Recent research has established the stability of the cultivation differential across different variables and populations, showing a remarkable consistency in the direction predicted by theory over many dozens of studies (Shanahan & Morgan, 1999).

THE SHIFT FROM "EFFECTS" TO "CULTIVATION" RESEARCH

The bulk of scientific inquiry (and most public discourse) about television's social impact follows theoretical models and methodological procedures of marketing and persuasion research. Much time, energy, and money have been invested in efforts to change people's attitudes and behaviors. By and large, however, the conceptualization of "effect" as short-run individual change has not produced research that helps us understand the distinctive features of television we have noted earlier. These features include massive, long-term, and common exposure of large and heterogeneous publics to centrally produced, mass-distributed, and repetitive systems of stories. But research traditions and ideological inhibitions both tend to produce resistance to the "cultivation perspective."

Traditional-effects research is based on evaluating specific informational, educational, political, or marketing efforts in terms of selective exposure and measurable before/after differences between those exposed to some message and others not exposed. Scholars steeped in those traditions find it difficult to accept the emphasis of cultivation analysis on total immersion rather than selective viewing and on the spread of stable similarities of outlook rather than on the remaining sources of cultural differentiation and change.

Similarly, we are still imbued with the ideology of print culture and its ideals of freedom, diversity, and an active electorate. This ideal also assumes the production and selection of information and entertainment from the point of view of a variety of competing and conflicting interests. That is why many also resist what they assume to be the emphasis of cultivation analysis on the "passive" viewer and the dissolution of authentic publics that this emphasis implies. They point to what they see as serious differences between cultivation theory and more recent excursions into reception models of mass communication (see McQuail, 2000). From the reception perspective, it seems logical to argue that other circumstances do intervene and can neutralize the cultivation process, that viewers do watch selectively, that program selections make a difference, and that how viewers construct meaning from texts is more important than how much they watch.

We do not dispute these contentions. The polysemy of mediated texts is well established. From the cultivation perspective, though, to say that audiences' interactions with media texts can produce enormous diversity and complexity does not negate that there can be important commonalities and consistencies as well across large bodies of media output. To explore those commonalities, as cultivation does, is not to deny that there are indeed differences; similarly, the examination of differences need not (and, arguably, *can*not) deny the possibility of shared meanings in a culture.

Polysemy is not limitless, and preferred readings can have great power. To glorify or privilege only the fact of polysemy is to risk removing any vestige of articulatory or determinational power from the text—and thereby to render culture impotent as well. Equally, concentrating on individual differences and immediate change misses the profound historical challenge television poses not only for research strategies but also for traditional theories of democratic government. That challenge is the absorption of diverse conceptions and attitudes into a stable and common mainstream. Thus, although individual viewers will certainly differ (and differ substantially) in their "reading" of any given television program, cultivation does not ask people what they think *about television texts*, much less any individual text. Rather, cultivation looks at exposure to massive flows of messages over long periods of time. The cultivation process takes place in the *interaction* of the viewer with the message; neither the message nor the viewer are all-powerful. In a sense, cultivation looks at the "master text" composed of the enduring, resilient, and residual core that is left over when all the particular individual and program-specific differences cancel each other out.

Thus, cultivation does not see television's contribution to conceptions of social reality as a one-way, monolithic "push" process. The influences of a pervasive medium on the composition and structure of the symbolic envi-

ronment are subtle, complex, and intermingled with other influences. Moreover, the question of "which comes first" is misleading and irrelevant, as is the presumed dichotomy between an "active" or "passive" audience (see Shanahan & Morgan, 1999). People are born into a symbolic environment with television as its mainstream; viewing both shapes and is a stable part of lifestyles and outlooks. Many of those with certain social and psychological characteristics, dispositions, and worldviews, as well as those who have fewer alternatives, use television as their major vehicle of cultural participation. To the extent that television dominates their sources of entertainment and information, continued exposure to its messages is likely to reiterate, confirm, and nourish—that is, cultivate—its own values and perspectives (see Gerbner, 1990; Morgan & Signorielli, 1990).

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 a continual, dynamic, ongoing process of interaction among messages, audiences, and contexts.

METHODS OF CULTIVATION ANALYSIS

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, channels, or genres.

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" viewing may hold for people's conceptions of social reality. Some of the questions are semiprojective, some use a forced-choice or forced-error format, and others simply measure beliefs, opinions, attitudes, or behaviors. (None ask respondents of their views about television itself or about any specific program or message.)

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 when viewing data are available for the respondents.

Television viewing is usually assessed by asking about the amount of time respondents watch television on an "average day." Multiple measures are used when available. Because these measures of amount of viewing are assumed to provide relative, not absolute, indicators, 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 analysis of simple patterns across light, medium, and heavy viewing groups (overall and in key subgroups) is useful to illuminate the general nature of the cultivation relationship, but it is normally followed up with more stringent multivariate analysis using continuous data.

The observable evidence of cultivation is likely to be modest in terms of 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 consistent pattern of even small but pervasive differences between light and heavy viewers may be of far-reaching consequence. Extensive and systematic reexamination of hundreds of cultivation studies carried out over more than two decades (using the statistical techniques of meta-analysis; Shanahan & Morgan, 1999) has shown that cultivation relationships typically manifest a strength of about .10 using a common metric, the Pearson correlation coefficient.

What some critics belittle as "small effects" may have significant repercussions. It takes but a few degrees shift in the average temperature to have an ice age or global warming. The 2000 U.S. presidential elections showed the havoc that could be wreaked by a miniscule percentage of votes. A range of 5 to 15% 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 overwhelmingly tips the scale of any closely balanced choice, vote, or other decision. A single percentage point ratings difference is worth many millions of dollars in advertising revenue—as the media know only too well. Thus, 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.

[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.

MAINSTREAMING

Most modern cultures consist of many diverse currents but in the context of a dominant structure of attitudes, beliefs, values, and practices. This dominant current is not simply the sum total of all the crosscurrents and subcurrents. 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 crosscurrents and subcurrents, 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 that 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. For example, regional differences, political ideology, and socioeconomic differences are much less influential on the attitudes and beliefs of heavy viewers (Gerbner, Gross, Morgan, & Signorielli, 1980; Morgan, 1986).

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 on the overarching patterns of the television world. Former and traditional distinctions (which flourished, in part, through the relative diversity provided by print) become blurred as successive generations and groups are enculturated into television's version of the world. Through the process of mainstreaming, television may have become the true "melting pot" of the American people—and increasingly of other countries around the globe.

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 in an early study that television drama tends to sharply underrepresent older people. Although those over 65 constitute a rapidly growing segment of the U.S. population, 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, Gross, Signorielli, & Morgan, 1980).

As another example, consider how likely people on television are to encounter violence compared to the rest of us. Three decades of message system analyses show that half or more of television characters are involved each week in some kind of violent action. Although FBI statistics have clear limitations, they indicate that in any one year fewer than 1% of people in the United States 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, 1980; Shanahan & Morgan, 1999), 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. Indeed, most of what we know, or think we know, is a mixture of all the stories and images we have absorbed. The labels of "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. But in any case, the investigation is not limited to the lessons of television "facts" compared to real-world (or even imaginary but different) statistics. The repetitive "lessons" we learn from television, beginning with infancy, are likely to become the basis for a broader worldview, making television a significant source of general values, ideologies, and perspectives as well as specific assumptions, beliefs, and images. Some of the most interesting and important issues for cultivation analysis involve the symbolic transformation of message system data into hypotheses about more general issues and assumptions (see also Hawkins & Pingree, 1982, 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 viewers 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., 1980; Signorielli, 1990).

The Mean World Index, composed of violence-related items, also illustrates the mainstreaming implications of viewing (Signorielli, 1990). For

example, combining data from the 1980, 1983, and 1986 General Social Surveys, heavy and light viewers who had not been to college were equally likely to score high on the Mean World Index: 53% of both the heavy and light viewers agreed with two or three of the items. However, among those who had some college education, television viewing made a considerable difference: 28% of the light viewers compared to 43% of the heavy viewers in this subgroup had 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 concerns the image of women. Our message system analyses in the 1970s and 1980s consistently showed that men outnumbered women on television by a factor of three to one; throughout the 1990s, despite all the changes taking place in the role of women in the real world, the population of the television world remained between 60 and 65% male (Signorielli & Kahlenberg, in press). Yet, 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. Rather, 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 third- and fifth-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. Although 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 & Lears, 1992).

Other studies have dealt with assumptions about marriage and work. Signorielli (1993) found that television cultivates realistic views about marriage but 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. Signorielli (1991) found that television viewing cultivates conceptions that reflect the ambivalent presentation of marriage on television. Adolescents who

watched more television were more likely to say they wanted to get married, to stay married to the same person for life, and to have children. Nevertheless, there was a positive relationship between amount of viewing and expressing the opinion that one sees so few good or happy marriages that one could question marriage as a way of life.

Many of television's families do not fit the "traditional nuclear" model, and single-parent families are overrepresented. Morgan, Leggett, and Shanahan (1999) found that, beyond all controls, heavy viewers were more likely than light viewers to accept single parenthood and out-of-wedlock childbirth. Nevertheless, the single parent on TV bears little resemblance to single-parent households in reality. On television, the single parent typically is a well-off male with full-time, live-in, domestic help. Heavy viewers may thus be more accepting of a highly fantasized and luxurious notion of single-parenthood.

Other studies have looked at issues of the cultivation of attitudes toward science or the environment. For instance, Shanahan, Morgan, and Stenbjerre (1997) found that heavy viewers are less likely to be knowledgeable about the environment, less likely to be active on environmental issues, and more likely to be fearful about specific environmental problems or issues. A cultivated fearful withdrawal from science issues was adduced, echoing earlier work (Gerbner, Gross, Morgan, & Signorielli, 1981) on the cultivation of images of science (also see Shanahan & McComas, 1999, for a more general treatment of TV and the environment).

Other extrapolations from content patterns have involved 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 nonideological 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; Gerbner, Gross, Morgan, & Signorielli, 1984).

We have observed this finding in over two decades of the General Social Survey data. GSS data from 1994 through 1998 reveal this pattern once again, as shown in Table 3.1. Heavy viewers in all subgroups tend to see themselves as "moderate" and avoid saying they are either "liberal" or "conservative." Fig. 3.1 shows the patterns for Democrats, Independents, and Republicans. The percentage choosing the "moderate" label is again substantially higher among heavy viewers, regardless of party; heavy viewing Democrats are less likely to say they are "liberal," whereas heavy viewing Republicans are less likely to call themselves "conservative." The general pattern shown in these data has appeared every year since 1975.

TABLE 3.1
Television Viewing and Political Self-Designation, in the 1994, 1996, and 1998 General Social Surveys (N's in parentheses)

	Percent who call themselves:											
	Liberal				*Moderate*				*Conservative*			
TV Viewing:	*L*	*M*	*H*	*Gamma*	*L*	*M*	*H*	*Gamma*	*L*	*M*	*H*	*Gamma*
Overall (5972)	30	27	26	–.05	32	37	41	.13***	39	36	33	–.08***
Men (2594)	27	26	24	–.05	31	35	42	.15***	42	40	34	–.10**
Women (3378)	31	28	28	–.06	32	38	41	.11***	36	33	32	–.06*
Young (1250)	41	32	29	–.17***	28	37	43	.20***	30	31	28	–.04
Middle (3742)	27	27	28	.00	33	36	39	.08**	40	37	34	–.08**
Older (968)	20	20	21	.02	32	38	44	.15**	47	42	35	–.17**
Low Educ. (2737)	19	24	25	.07*	40	41	43	.03	40	34	32	–.09**
High Educ. (3221)	34	30	29	–.08*	28	33	38	.14***	38	38	33	–.06
Low Income (2793)	34	31	28	–.08*	31	38	41	.11***	35	31	31	.03
High Income (2518)	29	25	25	–.09*	30	34	39	.10**	40	41	37	–.03
Democrat (2083)	48	41	36	–.15***	34	38	40	.08*	18	21	24	.11*
Independent (2102)	31	27	24	–.12**	38	42	45	.08*	30	32	32	.02
Republican (1662)	9	12	13	.14*	21	29	36	.22***	70	59	50	–.25***

* $p<.05$ ** $p<.01$ *** $p<.001$

Notes: TV viewing: Light = 1 hour or less daily (N = 1586); Medium = 2 or 3 hours daily (N = 2860); Heavy = 4 or more hours daily (N = 1803). Age: Younger = 18 to 30 years old; Middle = 31 to 64 years old; Older = 65 years or older. Education: Low = 12 or fewer years; High = 13 or more years (at least some college). Income: Low = less than $35,000 yearly; High = $35,000 or more yearly.

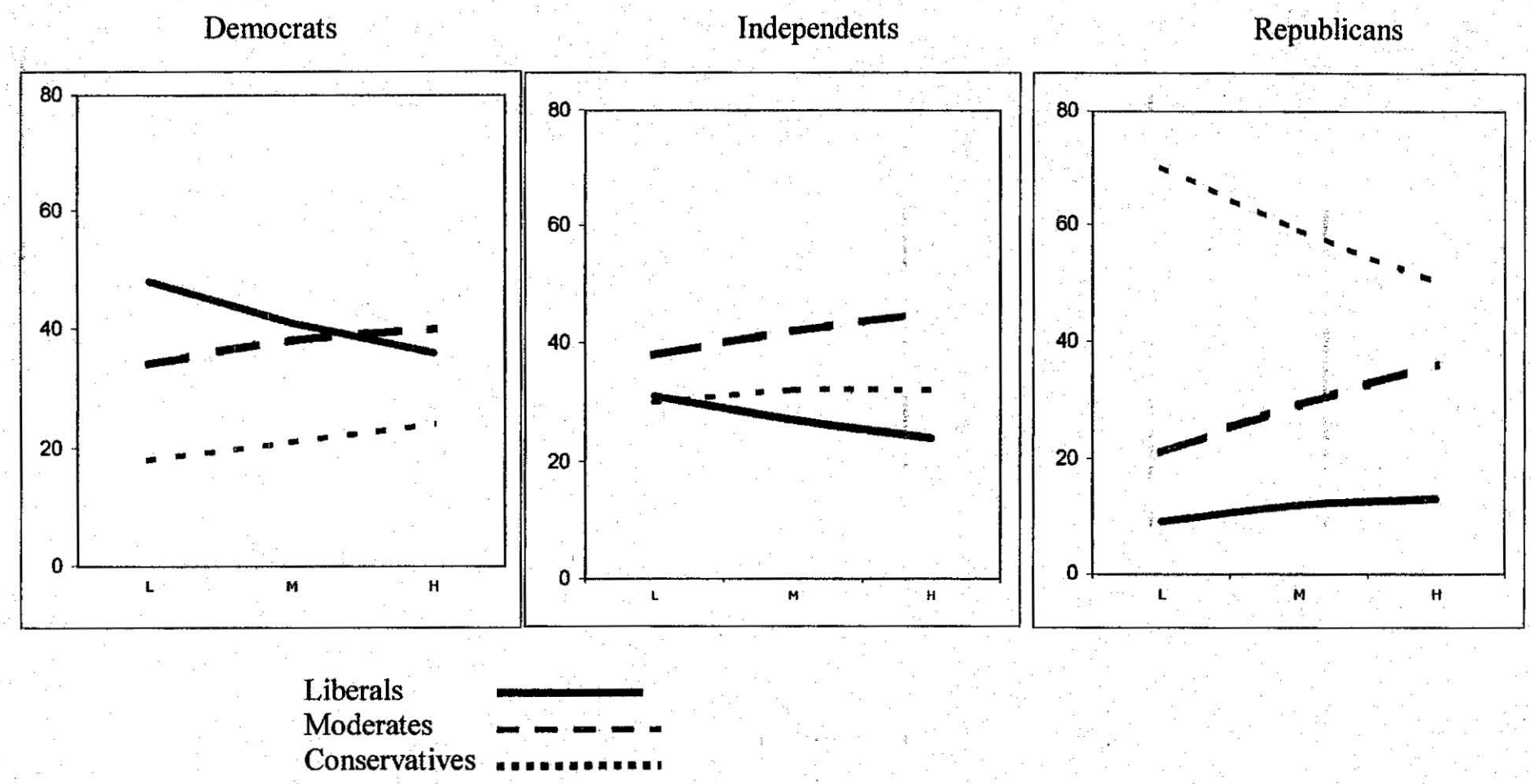

FIG. 3.1. Comparisons of political self-designation by amount of viewing within parties.

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 that 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 although mainstreaming bends toward the right on political issues, it leans toward 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, & 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.

Also, the 1990s saw a great deal of progress on research seeking to uncover cognitive explanations for the mechanics of cultivation: how does it "work"? A model first offered by Hawkins and Pingree (1982) focused on how television contributes to conceptions of social reality "within the heads" of individuals by breaking down the process into two discrete steps, delineated as "learning" and "construction." Yet, no support for this model was generated. Similarly, studies that attempted to shed light on black-box cognitive processes by highlighting the concept of the "perceived reality" did not produce any firm conclusions (Slater & Elliott, 1982; Potter, 1986).

Shapiro and Lang (1991) hypothesized that television can affect reality perceptions because people simply forget that what they see on TV is not real. Mares (1996) tested this hypothesis and found that those who tended to confuse fiction programs for reality saw the world as a meaner, more violent place, and also gave "TV answers" to questions about social class estimates. But Shrum (1997) argued that people do not consider the source of their information when making social reality judgments, and he offered a different explanation of Mares' data.

Shrum's basic idea is that, because TV images are "heuristically" available to heavy viewers, they tend to use them more readily in making mental judgments, in a kind of cognitive shortcut. Most of Shrum's studies (see, e.g., Shrum 1995, 1999) find that heavy viewers give faster responses to questions about dependent variables, in directions consistent with

what cultivation predicts. A speedy response to a question implies that an answer is more readily accessible, that the general issue is more salient, that the respondent does not have to dig very deeply to come up with an answer. Shrum's cognitive account is highly supportive of cultivation. It also suggests that television does not necessarily *change* attitudes, but that it makes them *stronger*.

INTERNATIONAL CULTIVATION ANALYSIS

Cultivation analysis is ideally suited to multinational and cross-cultural comparative study (Gerbner, 1977, 1989; Morgan, 1990). In fact, such a study is the best test of systemwide 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, 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 we note later, we found this, surprisingly, to be the case in the former Soviet Union). Therefore, they may or may not lend themselves to the type of cultivation and mainstreaming we find in the United States (see Gerbner, 1990; Morgan, 1990; Morgan & Shanahan, 1995; Tamborini & Choi, 1990).

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 United States. 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 United States.

In England, Wober (1978) found little support for cultivation in terms of images of violence. (See also Wober, 1984, 1990; Wober & Gunter, 1988.) But there was little violence in British programs, and U.S. programs only made up about 15% of British screen time (see also Shanahan & Morgan, 1999). Piepe, Charlton, and Morey (1990) found evidence of political "homogenization" (mainstreaming) in Britain that was highly congruent with U.S. findings (Gerbner, Gross, Morgan, & Signorielli, 1982), as did Morgan and Shanahan (1995) in Argentina.

In the Netherlands, Bouwman (1984) found weak associations between the 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 & Signorielli, 1985; Bouwman & Stappers, 1984), and much programming was imported from the United States. 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 in the United States (see also Bouwman, 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 & Windahl, 1984; Reimer & Rosengren, 1990), Argentina (Morgan & Shanahan, 1995), the Philippines (Tan, Tan, & Tan, 1987), Taiwan and Mexico (Tan, Li, & Simpson, 1986), Japan (Saito, 1991), and Thailand (Tan & 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 toward the U.S. and protectiveness toward Korean culture, suggesting a "backlash" of nationalism among the more politicized college students.

Most of these studies examined single countries. Nevertheless, other studies have explored the comparative aspects of cultivation analysis. Morgan and Shanahan (1992) 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.

A study of U.S. and (what was then) Soviet television conducted in 1989 and 1990 found that television played a different role in the two countries. In the United States, but not in the former Soviet Union, television was associated with heightened anxieties about neighborhood safety, perhaps as a result of the much lower frequency of violence on Soviet television. In both countries, but especially in the former Soviet Union, the more people watched television the more likely they were to say that housework is primarily the responsibility of the woman. General satisfaction with life was

consistently lower among heavy than among light television viewers in the United States, but not in the former Soviet Union (where it was relatively low for everyone).

Lacking regular prime-time dramatic series and relying more on movies, theater, documentaries, and the classics, Soviet television did, in fact, present more diversified dramatic fare than U.S. television. Perhaps due to this, television viewing seemed to have far greater mainstreaming consequences in the United States than was the case in the Soviet Union. The availability of different cultural and language programming in the different former Soviet republics may also have contributed to the relative diversity of their television—and to the centrifugal forces that eventually tore the Soviet Union apart.

In sum, in countries in which television's portrayals are less repetitive and homogeneous than in the United States, 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 few channels with a diverse and balanced program structure can foster (and, in fact, compel) more diversified viewing than many channels competing for the same audience by 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: (a) How important is television in the culture? and (b) How consistent and coherent is the total system of its messages? The more important, consistent, and coherent the more cultivation can be expected. The privatization of former public service broadcast systems around the world and the march toward globalization in programming, distribution, and marketing together make the need for international cultivation analysis more critical than ever.

CULTIVATION IN THE 21ST CENTURY

The theory of cultivation was developed when "television" in the United States was synonymous with three national broadcast networks, plus a small handful of independent and public/educational stations. The three major networks attracted well over 90% of the viewing audience, night

after night. Fledgling cable systems simply extended the reach of the networks, providing little if any competitive programming.

Those days of network dominance are long gone. Technological developments such as cable and satellite networks, VCRs, and the Internet have brought a significant erosion in audience share (and revenue) for the old "Big Three" broadcasting networks and have altered the marketing and distribution of movies. Yet, there is little evidence that proliferation of channels has led to any substantially greater diversity of content. Indeed, the mere availability of more channels does not fundamentally change the socioeconomic dynamics that drive the production and distribution of programs. On the contrary, that dynamic is intensified by increased concentration of ownership and control and by the dissolution of the traditional barriers between and among networks, station owners, production studios, syndicators, MSOs, cable networks, and advertisers.

Viewers may feel a new sense of power and control derived from the ability to freeze a frame, review a scene, and zip through commercials (or zap them entirely), or interact with them. The easy availability of prerecorded cassettes and increasing choices offered via pay-per-view (PPV) may also give viewers an unprecedented range of potential choices. Digital videodiscs (DVD) may offer superior visual resolution and multichannel sound. But again, there is no evidence that any of this has changed viewing habits—or that the content that regular and heavy television viewers consume most presents worldviews, values, and stereotypes fundamentally different from most network-type programs (Morgan, Shanahan, & Harris, 1990). Digital signal compression will soon flood viewers with even more channels, but with what programming? In fact, as channels proliferate, sources of original dramatic programming and perspectives decline. One reflection of the monopoly of market orientation is the absence of poor (i.e., low-income) characters and of diverse ideological (i.e., political, religious) orientations.

In particular, computers and the Internet seem to threaten the stability of the traditional media landscape. But at the end of 2000, Nielsen/Netratings reports that average Web usage amounts to just about 3 hours per week, a fraction of the time most people spend watching television (Nielsen, 2000). AOL Web sites reach nearly half of all Internet users, who visit for an average of 13 minutes per session. Figuring prominently among top sites are those with strong connections to dominant television networks and services, including Disney (owner of ABC) and Time Warner (owner of Turner's media empire, and merging with AOL). Clearly, the rise of the Web—though of great significance—represents not only a relatively small amount of audience time but also an ever-greater role for dominant media corporations.

A May 1999 Nielsen report noted that although people in Internet homes watch less television, "analyses of the same homes before they had Internet access revealed that they were lighter TV viewers to begin with. There is currently almost no indication that Internet access cannibalizes television usage; instead, it offers a targeted vehicle to supplement advertising reach among these lighter television viewers" (Nielsen, 1999). Moreover, a great deal of Web usage takes place at *work*—nearly 23 hours a month at the end of 2000—extending the reach of advertisers to the workplace as well (Nielsen, 2000). This shows quite clearly that although the Internet may provide access to alternative channels of information, it can also deepen and sharpen the reach of dominant media corporations.

Still, only a tiny minority uses the Internet for viewing video or listening to audio programs as an alternative to dominant message providers. Even when the Internet provides new delivery systems that threaten dominant interests, as in the case of Napster, it is quickly swallowed up within the existing institutional structure. Despite widespread hopes (and fears) that the Internet will make possible a new information highway that may replace standard mass media, there are no popular Internet or Web-based programs that yet threaten the network-cable alliance; on the contrary, networks and cable channels are working feverishly to drive their viewers to their Web sites, to allow them to obtain more personal information from viewers, and to create another platform for advertising exposures. At most, the most popular online services such as AOL gain audience share at any given time comparable to that of CNN or MTV, which is a rather small and specialized audience. Also, the dot-com frenzy of 1999 gave way to a much more sober atmosphere for Web entertainment, with many start-ups closing, having failed to make a single penny of profit. Moreover, a November 2000 study by Burke, Inc., found that viewers with home Internet access spend 4 hours a week watching television while online ("Individuals with Internet Access," 2000). The report noted that although "some have suggested that the Internet is killing TV," the results "show that Internet use not only coexists with TV viewing, it can encourage and enhance the viewing experience." Thus, cultivation theorists continue to proceed under the assumption that TV is "the dominant feature of Americans' free time" (Robinson & Godbey, 1997).

Channels will continue to proliferate, by cable, satellite, and digital transmission. New developments such as digital video recorders will become more common, allowing viewers to more easily indulge their own personal programming tastes (and, maybe, to ignore commercials). Digital technologies for storing and manipulating personal video libraries will continue to emerge, as will options for direct, on-demand delivery of special programs through more versatile set-top boxes (which may also include DVRs and high-speed Internet connections). The broadcast net-

work audience share will continue to shrivel (despite the occasional blockbuster series) and be divided among an ever-increasing number of competing channels. Developments such as interactive TV that will allow advertisers to reach finely targeted groups—and even *individual* viewers—will be vigorously pursued.

Yet, all this is being accompanied by massive and unprecedented concentrations of ownership of media industries and program sources. Whether the most successful entertainment is delivered through television networks or in the form of video-on-demand through fiber-optic cable, satellites, or some other medium may make little difference if the messages don't change. Given that, there is little evidence to date that the dominant patterns of image cultivation will show any corresponding fragmentation. For most viewers, extended delivery systems signal even deeper penetration and integration of the dominant patterns of images and messages into everyday life. Nevertheless, the empirical investigation of these developments, and their implications for cultivation analysis in general and for mainstreaming in particular, represents a major challenge for the new century.

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