

# Yesterday's New Cultivation, Tomorrow

Michael Morgan

*Department of Communication  
University of Massachusetts*

James Shanahan

*The Media School  
Indiana University*

Nancy Signorielli

*Department of Communication  
University of Delaware*

This article explores the continued applicability of cultivation theory in a new media environment. Previous theoretical and empirical work on media that were “new” at the time (such as cable TV and VCRs) is reviewed as context. Changes in the social and media conditions on which cultivation were premised are also discussed. Some ideas for new methodological approaches to cultivation measurement and study design are offered. Gerbner’s thoughts on

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**Michael Morgan** (Ph.D., University of Pennsylvania, 1980) is a Professor in the Department of Communication at the University of Massachusetts. His research interests include cultivation analysis and media effects, technology, and policy.

**James Shanahan** (Ph.D., University of Massachusetts/Amherst, 1991) is Dean of the Media School at Indiana University. His research interests include cultural indicators, cultivation theory, media effects, and environmental communication.

**Nancy Signorielli** (Ph.D., University of Pennsylvania, 1975) is a Professor in the Department of Communication at the University of Delaware. Her research interests include content studies, cultivation analysis, media effects, media and children.

Correspondence should be addressed to James Shanahan, The Media School, Indiana University, Ernie Pyle Hall, 940 E. Seventh St., Bloomington, IN 47405. E-mail: [jes30@indiana.edu](mailto:jes30@indiana.edu)

television as a “new state religion” are used as a framework for our analysis of the current relevance of cultivation theory more than four decades after its introduction, in a vastly different media context.

Spoiler alert: There's nothing particularly “new” about new communication technologies. Modern media have been in a near-constant state of transformation and evolution for at least 100 years. Any apparent “Golden Age” of media stability is quickly upended. The glory days of the first heavily consumed, massively shared electronic mass medium, radio, came to a halt with the emergence of the stunning new technology of television. Broadcast network television's monopolization of our living rooms, consciousness, and culture was soon eroded by the revolutionary new technologies of cable and the VCR. Now, digital media are the latest arrival to disrupt the status quo, even as we've already been through many of the new features that these technologies seem to offer. Mobility, for example? It's hard to beat the 1950s experience of taking that first transistor radio to the beach, or to match the hype surrounding the introduction of “portable” TVs (Spigel, 2001). In terms of media technology, institutions, and programming, the communication environment is never *not* changing and is always “new” and “emerging” (Gitelman, 2006).

Yet, although some changes in media technology may be merely cosmetic, trendy, short-lived, and gimmicky, others may be more profound, requiring us to reexamine (and perhaps revise, refresh, or relinquish) long-standing theories underlying communication research. The call for submissions for this issue notes that “it was fairly straightforward to link . . . the cultivation of audience perceptions to media patterns” in a bygone era. It may or may not have been all that straightforward then, but it's certainly far from straightforward now. In this article we take a look at cultivation theory and research (Gerbner, 1973; Gerbner, Gross, Morgan, & Signorielli, 1980; Morgan, Shanahan, & Signorielli, 2012) and assess the extent to which its assumptions, premises, and procedures can still be meaningfully applied in today's media environment.

Cultivation theory has been one of the most important theories developed during the past 50 years for understanding the social and cultural impacts of media, focusing on how television viewing, in particular, is related to our conceptions of social reality. Cultivation, along with agenda-setting (McCombs & Shaw, 1972) and uses and gratifications (Katz, Blumler, & Gurevitch, 1973), is one of the three most-cited theories in mass communication research published in key scholarly journals between 1956 and 2000 (Bryant & Miron, 2004). Another analysis of media effects articles published in 16 journals between 1993 and 2005 found that cultivation was *the* most cited theory (Potter & Riddle, 2007). Cultivation as an idea has survived a variety of sometimes withering attacks in the past (see Shanahan & Morgan, 1999, for a review of these). Although a considerable amount of current research continues to be

conducted under the “umbrella” of cultivation, the critical question now is whether such a “traditional” media effects theory still has relevance in today’s dramatically different media environment.

We first briefly describe cultivation theory in general and how cultivation has helped explain what it means to live with television. We limit our discussion of this topic to some highlights of what has been presented frequently and in detail elsewhere (e.g., Morgan, Shanahan, & Signorielli, 2009, 2012; Shanahan & Morgan, 1999). We then discuss cultivation in light of today’s media environment and try to forecast where it might go with the media of the future. Ultimately, our goal is to present some very specific research recommendations to attempt to keep cultivation theory and research relevant in a brave new media future that has a real chance of coming to be.

### CONCEPTUALIZING TELEVISION IN THE ERA OF MASS COMMUNICATION

To assess the usefulness and applicability of cultivation today, we first need to review how television was conceived, ideologically, in the period of cultivation’s theoretical inception. George Gerbner (1919–2005), the originator of cultivation theory, elaborated some relevant notions quite clearly in a early essay on the role of television as the “new state religion” (Gerbner, 1977). In a quintessentially mass social structure that was seeing the disappearance of religion as a force for maintaining social order, he saw television as filling the breach with formulaic, repetitive stories that were ritualistically consumed from cradle to grave by a large and heterogeneous mass audience. This familiar theme from the larger body of critical thinking about mass media as a form of social control (Shanahan & Jones, 1999) both emerged from and fit very well within the spirit and tenor of the mass society times: a monolithic and fairly stable TV structure with one basic purpose, that of creating very broadly popular programs that would deliver vast and heterogeneous audiences to advertisers.

Gerbner outlined six basic ideas that he thought should be taken into account when thinking about the historically unprecedented role and impacts of television. First, Gerbner (1977) noted that TV consumes “more time and attention of more people than all other media activities combined” (p. 147). Second, Gerbner pointed out that there is no planning or waiting for TV; it simply comes to you in your home and is there to be watched all the time, thereby defeating with convenience other media that might require a little more activity or selection on the part of the audience. Third, Gerbner thought it was important that TV requires no literacy. This feature made it appealing to people of all levels of education and literary ability, and

allowed nonreaders to share the same culture as the literate, but also brought with it the danger that it might dumb down the achievements of (in McLuhan's terms) the "culture of the eye."

Taken together, these three assumptions portrayed television as providing a ubiquitous, unified, and undifferentiated "stream" of messages, perhaps an early version of a kind of "feed" of information that we now so routinely see on our social media pages. But Gerbner also argued, fourth, for the importance of the "totality" of TV's messages, as a system, which he saw as fulfilling the social function previously served by myth or legend. "It makes no sense to study the content or impact of one type of program in isolation from the others. The same viewers watch them all; the total system as a whole is absorbed into the mainstream of common consciousness" (Gerbner, 1977, p. 147). Fifth, Gerbner thought it was important that there were not separate story-systems within TV: "Unlike other media, television tells its stories to children, parents, and grandparents all at the same time" (p. 148). Finally, Gerbner noted that minority groups were forced to see their image reflected through the perspective of messages designed by and for the majority.

These assumptions led Gerbner and colleagues to develop a theory that would attempt to capture the very broad ramifications of this new medium and its message system; in particular, the theory was designed to reflect the assumption that television viewing is a relatively nonselective activity (compared to the way other media are used), along with an emphasis on aggregate patterns of messages to which entire communities (and not necessarily individuals) are exposed over long periods. We present some details about their specific research procedures next. But it is primarily the question of whether new media and social change have altered the conditions under which Gerbner premised cultivation—and in which these assumptions made sense—that we need to consider.

## CULTIVATION AND MEDIA CHANGE

Even the most casual observer of today's media scene takes note of the rate and amount of change in media technologies and institutions. We are no different, especially in wondering what changes might be in store for cultivation theory, which has been a standby, warhorse, paradigmatic theory for mass communication theory for decades. As with many of the most important and basic communication theories, including social cognitive theory (Bandura, 2001), agenda setting (McCombs & Shaw, 1972), and uses and gratifications (Katz et al., 1973), we can—and must—ask whether

cultivation has evolved in ways to keep it relevant to our understanding of communication. More important, will it?

At the same time, this is not an altogether new challenge for cultivation research. Even as early as the 1980s, cultivation theorists were exploring the effects of the new technologies of the day (at that time, cable TV and VCRs), looking into the extent to which these new opportunities for user interactivity and choice were somehow changing, moderating, or mediating the impacts of TV viewing (see, e.g., Morgan & Rothschild, 1983; Morgan & Shanahan, 1991). In those early studies, the data suggested that the use of these new technologies was more likely to amplify cultivation than attenuate it; this led us to argue that new technologies should mainly be seen as new “delivery vehicles” for “more of the same” content, especially for heavy viewers.

Today’s changes seem to dwarf those that concerned researchers in the 1980s. And so we are again confronted with questions about whether a theory that was born in an era of mass communication, with three or four monolithic networked distributors of TV content, is still relevant in an era with many, many more channels; numerous alternate platforms for delivering content (computers, phones, tablets, video game consoles, etc.); virtually endless on-demand and streaming options; sharply fragmented audiences; and, arguably, far more real diversity and variation in programming. This is an era in which virtually anything is available, anywhere, anytime; it is an era in which, with occasional exceptions (e.g., the Super Bowl), we now only rarely engage in a shared ritual of most people watching the same thing at the same time.

Cultivation has “survived” thus far for any number of reasons, but probably the most important one is related to its simplicity or parsimony: At its heart, it argues that the stories we tell (and are told) have something to do with the way we think about the world. Many studies, not all of which subscribe to the original methods and theoretical frameworks laid out by Gerbner and his colleagues (see Gerbner, 1990; Gerbner & Gross, 1976), look at relationships between exposure to some content and some dependent variable, and call that “cultivation.” As long as the possibilities for these types of analysis exist, we should continue to see cultivation used (and misused), at least as a metaphor. But we think there are deeper reasons why cultivation will persist as a useful approach for examining media’s role in our life. We have set forth some of these ideas in more detail elsewhere (Morgan & Shanahan, 2010; Morgan et al., 2012); here we would like to tie them together with some specific suggestions for enhancements and modifications to the methodology and assumptions of cultivation analysis that make sense to us given the reality of media institutions, technologies, and content today.

## CULTIVATION AND STORYTELLING

Cultivation was devised by Gerbner as a new and different way to think about media effects (Gerbner, 1969b). Growing up in pre-war Hungary, Gerbner became fascinated with the ways in which the stories, songs, art, and rituals of the peasants in the countryside reflected, expressed, and reproduced their culture, their worldviews, beliefs, and practices. With these interests, he had intended to study folklore (Morgan, 2012). Later, applying this interest more systematically to the rise of mass media in mid-20th century America—with the stories of modern society being mass-produced by commercial interests—he examined a broad range of specific media and messages: the fate of women in confession magazines (Gerbner, 1958), the role of the film hero in different cultures (Gerbner, 1969a), the image of education in news and fiction (Gerbner 1966, 1967), and more. Foreshadowing the metaphor of cultivation, he saw popular culture as “a large part of the soil and climate in which we grow up and learn” (Gerbner, 1959, p. 270).

As television became an overriding social concern, his attention was perhaps naturally drawn to it, but he never abandoned the importance of the story-based conception of media effects. “Cultivation” as a theory and method may have become most prominent in the context of broadcast television’s rise to dominance, which meant massive consumption of a limited range of content by heterogeneous audiences. But the underlying concern with the cultural role of storytelling—and who gets to tell the stories—is arguably of even more relevance in today’s explosive digital media world.

The goal of cultivation was to understand the consequences of growing up and living in a cultural environment dominated by mediated mass communication—and to move away from the focus on immediate effects or change following exposure to specific messages that dominated that era’s communication research. He emphasized television because it nearly monopolized people’s cultural participation and public debate; radio, newspapers, films, and other mass media of the mid-20th century (before the rise of the Internet) all played relatively smaller and more specialized roles once television took center stage. Even with all of the changes in the media environment, television today, no matter what the platform, still maintains its position as the dominant storyteller of the culture, and still attracts larger audiences (and more advertising dollars; Advertising Age, 2013) than other media, all of which keeps cultivation theory at the forefront of relevant theories of communication.

Gerbner’s broader paradigm, called Cultural Indicators, called for the investigation of (a) the institutional processes, pressures, and constraints that underlie the production of media content (institutional process analysis); (b) the most prevalent images in media content (message system

analysis); and (c) the relationships between media exposure and audience beliefs and behaviors (cultivation analysis; Gerbner, 1973). In its simplest form, cultivation analysis asks if those who watch more television have views that are more reflective of what they see on television compared to people who have similar demographic characteristics but who watch less television (Morgan et al., 2009). Although the vast bulk of research at the time defined media effects in terms of some kind of “change,” Gerbner argued that stability, cultural resistance, and *lack* of change were more profound and significant effects of mass communication.

Research inspired by Gerbner’s ideas has been remarkably prolific. As of 2015, nearly 650 relevant studies had been published. The earliest cultivation studies investigated how television viewing contributed to beliefs and conceptions of violence and victimization, but the research soon expanded to include many other aspects of life and society, including gender roles, 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 and international comparative contexts. (An extensive examination of the cultivation literature may be found in Shanahan & Morgan, 1999.)

## DOING CULTIVATION RESEARCH

Cultivation studies begin by identifying and assessing the most recurrent and stable patterns in television content, looking for those images and values that cut across most program genres. Beginning with studies conducted by the original team of researchers, weeklong samples of prime-time network television programming have now been analyzed by trained coders every year since 1967. For five decades, these studies have examined numerous elements of programming including violence, sex roles, race, science, health, and more, revealing broad trends of change and stability over time.

The findings from these analyses of content are used to generate questions that explore people’s conceptions about social reality. These questions are posed to samples of children, adolescents, or adults using standard techniques of survey methodology. In addition, some cultivation analyses use existing data sets (such as the National Opinion Research Center’s General Social Survey), with the methods of secondary analysis. The “orthodox” analyses look for differences in overall amount of viewing, that is, in terms of exposure to the overall message system of television, not based on amount of exposure to selected genres or types of shows (although some researchers are increasingly promoting this approach as well; see Bilandzic

& Busselle, 2012). The resulting relationships, if any, between amount of viewing and the tendency to respond in terms of what is seen on television reflect television's contribution to viewers' conceptions of social reality (cultivation).

Although all demographic groups have people who watch more or less television, there are overall differences between those who watch more and those who watch less in terms of sex, age, education, income, occupation, race, and other demographic and social variables. Accordingly, cultivation patterns are examined controlling for these other background factors—both within specific subgroups (such as those with more vs. less education, or males vs. females, etc.), as well as through statistical techniques that control for multiple variables simultaneously and test for interactions.

Gerbner argued that the world of television drama is an organic and coherent whole. From this perspective, it stands to reason that if you spend most of your time watching television, no matter what the platform or format, then you will have less time to explore other options that might provide alternative views or information about the world. Consequently cultivation theory predicts that the more time a person spends watching television and being immersed in this *entire* mediated world, the more likely their views about reality will reflect the images that are seen.

### Evidence of Cultivation

As with many media effects studies, cultivation analyses typically generate small effect sizes. Even those who watch “very little” television may still watch 7 to 10 hours a week, and certainly interact with those who watch more television. Thus, the cards are stacked against very strong evidence of cultivation. Still, even small differences between light and heavy viewers may indicate far-reaching consequences. As a difference of 1 percentage point in ratings can mean the success or failure of a television program, and a difference of a few percentage points (or less) in an election will determine who wins or who loses, so can a small correlation between television exposure and outlooks be indicative of a phenomenon that build toward a very significant impact.

In contrast to most research (and public concern) about the possibility that exposure to television violence will stimulate aggressive behavior, cultivation studies have found that those who spend more time with television are more likely to believe that they will be involved in violence; to have exaggerated conceptions of danger, mistrust, and victimization; and to hold many inaccurate beliefs about crime and law enforcement. Those who watch more television say that you cannot “be too careful” in dealing with people, say that most people are “just looking out for themselves” and “cannot be

trusted,” and believe that there are more people in law enforcement occupations than real-world job statistics show (Gerbner et al., 1980; Signorielli, 1990). This pattern of conceptions became known as the “Mean World Syndrome.”

### Variations in Cultivation: *Resonance* and *Mainstreaming*

Cultivation is a continual, dynamic, ongoing relationship, not a unidirectional flow of influence from television to viewers. Research has found two processes that reflect differences in how cultivation may work. Direct experience may be important for some viewers; the phenomenon called *resonance* illustrates how a person’s everyday reality and patterns of television viewing may provide a double dose of messages that “resonate” and amplify cultivation. For example, those who live in high-crime urban areas often show stronger relationships between amount of viewing and self-reported fear of crime (Gerbner et al., 1980).

The second phenomenon, *mainstreaming*, has been observed much more frequently. It suggests that television viewing may enhance similarities among otherwise divergent groups of people. In “classic” cultivation theory, television was seen as providing a shared daily ritual of a highly limited and restricted range of programs and perspectives for a nearly unlimited and diverse range of publics. Media images seen on television thus tend to cross—and erode—boundaries of age, class, education, and region. Consequently, the “mainstream” is a relative commonality of outlooks and values that is cultivated by consistent and heavy exposure to the world of television. Mainstreaming means that heavy viewing may override differences in perspectives and behavior that result from other factors and influences. In other words, attitudes or behaviors that would ordinarily be attributed to social or political characteristics may be diminished or absent in groups of heavy television viewers (Gerbner et al., 1980; Shanahan & Morgan, 1999).

Some have argued that mainstreaming and resonance, which were advanced as theoretical refinements after some of the initial debate about the validity of early cultivation findings, show that cultivation was simply a theory that refused to be falsified (e.g., Hirsch, 1981). In response, Gerbner, Gross, Morgan, and Signorielli (1981) showed that mainstreaming and resonance were only two of many potential subgroup variations, the majority of which would fit neither explanation (and would therefore clearly falsify them; see also Shanahan & Morgan, 1999). They also pointed out that the metaphor of mainstreaming was deeply implicated in the theory from its earliest development. As we note next, changes in the media environment may raise questions about the continued persistence of mainstreaming as a viable process. But this is

based more on whether social conditions have changed sufficiently from the early days of cultivation rather than concern about when and how the idea of mainstreaming was introduced in the evolution of cultivation studies.

### Diversity in Cultivation Research: Theoretical Football

Throughout the years there have been many distinct and divergent viewpoints on how cultivation analysis should be done, as well as a tremendous variety of studies connected in some way under the umbrella of cultivation. And there were many critiques, especially in the early 1980s (but continuing to this day; see Potter, 2014).

The field was and has always been open for alternative explanations. Gerbner teed up a theoretical football that could be kicked in any number of ways. And so, even in the earliest days of cultivation, there were those who saw more colors in the television landscape than Gerbner saw; cultivation offended the critical sensibilities of those who saw plenty of diversity and many alternate roads for the “selective” viewer. Of course, this whole question engaged the long-standing debate over active versus passive audiences, over the range of meanings and interpretations that viewers might derive from media messages, a debate in which Gerbner’s ideas clearly seemed to some to favor a substantial degree of passivity. A fair summary of these views might be attributed to Horace Newcomb’s “humanistic” critique of cultivation, which suggested that “having predetermined what television was ‘like’ and ‘for,’ Gerbner et al. failed to interrogate the alternative and variant meanings of media violence—in terms of either what they expressed or how they were interpreted” (Ruddock, 2011, p. 344). (It should be noted that Gerbner himself never referred to the audience as “passive” and felt that the entire argument over audience activity was irrelevant to cultivation.)

Other lines of investigation kicked the ball around in different ways. One especially productive line of research has explored the cognitive processes underlying cultivation. Gerbner himself felt that research on cognitive processing was not especially relevant to cultivation because he assumed the processes involved in cultivation were simply those through which people learned things from their environment in general. Nevertheless, the work of Shrum (1999, 2001; Shrum & Lee, 2012) has consistently shown that heuristic processing (using mental shortcuts) is central to learning about social reality from television. This body of work on the cognitive processing of media messages has provided a substantial degree of internal validity to cultivation theory.

Much of this work has been based on the distinction between what have been described as “first-order” and “second-order” effects in the types of

questions asked in cultivation analyses. Questions isolating first-order effects are those that deal with estimates, typically quantitative, about the frequency or probability that something will occur in the world; these questions have an answer grounded in fact, such as one's chances of being involved in violence, or the number of people who work in law enforcement. Questions examining second-order effects, on the other hand, deal with relationships between viewing and holding attitudes/conceptions or making value judgments about social reality.

For example, the notion of the "Mean World Syndrome" (a second-order effect) does not make any reference to or assumptions about how mean or trustworthy people actually are in the real world. Similarly, the underrepresentation of women on television would not be likely to convince viewers that there are fewer women in the real world (a first-order belief), but it may invoke what Gerbner called a "symbolic transformation" such that it becomes an indicator of devaluation and restriction that supports the cultivation of traditional gender roles (a second-order belief). Shrum (2004; Shrum & Lee, 2012) has found that the distinction between first- and second-order judgments is critical to understanding cultivation, as the two types of questions are based on entirely different psychological processes. Very briefly, first-order judgments are made heuristically, based on recency and vividness, at the time they are activated; second-order judgments, on the other hand, reflect an online process in which judgments are formed at the time of viewing.

Others have examined the notion of "realism," particularly "perceived realism," as a critical component in understanding cultivation. Although many researchers have argued that programs perceived as "realistic" would more likely influence beliefs about the world, recent research shows that the answer is not that simple. For example, Busselle and Bilandzic (2012) suggested that perceived realism is a "default" condition; we just assume that content is realistic unless there is a specific reason not to. Most content, even that recognized as fantasy, has some element of perceived realism, and viewers carry impressions from television to their understanding of the real world. As Gerbner (1999) put it, "You do not have to believe the 'facts' of Little Red Riding Hood to grasp the notion that big bad 'wolves' victimize old women and trick little girls—a lesson in gender roles, fear and power" (p. ix).

Bilandzic and Busselle (2008) also proposed a model in which narrative "transportation" (becoming completely "involved" in or "swept away" by a story) is a key element in cultivation. Their findings suggest that "transportability" may be a personality trait that increases cultivation. Many other discussions and examples of recent developments in cultivation research can be found in Morgan et al. (2012).

As a scan of the literature on cultivation shows, there are many different ways to conceive what might be happening in the cultivation process. Some scholars have very convincingly demonstrated the role of heuristics, online processing, and transportation, but others scholars may wish to adduce other psychological processes (whether called “learning,” “memory,” “reinforcements,” “scripts,” “schema,” or some other new term or concept). Ultimately, even though the communication and psychology literatures have probed deeply into these topics, and will likely continue to do so, the durability of cultivation as an idea (or even as a “paradigm”; see Morgan & Shanahan, 2010) rests on its parsimony as a macrosocial explication.

Still, studies of cognitive processing, perceived realism, narrative transportation, and related issues may be needed now more than ever to explore cultivation in the new media environment. Do these processing strategies change if we are watching on a massive Ultra HD (4K) screen or on a 4-inch phone? Or if we’re tweeting and sending e-mail or checking Facebook while watching an online program? Or if we’re watching “individually” (on our own screen, even if others are watching something different on their own screens, in the same room)? Or if we are choosing what to watch and when we want to watch it instead of just watching what is on, or what we “always” watch (on, say, Thursdays at 9:00 p.m.)? Or if we are bingeing on seven or eight episodes of the same program back-to-back?

## NEW MEDIA

As this special issue stresses, it is obvious that many aspects of the media environment have changed profoundly. The way we receive media has evolved from the 1950s and 1960s from strictly broadcast television, theatrical films, radio, and print media (newspapers, magazines, books) to the current broad-based, all-encompassing electronic digital media environment. Cable or satellite systems provide homes with hundreds of channels and many homes can now call up thousands of programs and movies on demand. The Internet provides instant access to virtually any film or television show ever made (sometimes legally, sometimes not). Subscription video-on-demand services such as Netflix provide easy access to both entire seasons of television programs and a vast library of theatrical films, and the amount of original online programming being produced by Netflix, Amazon, YouTube, Hulu Plus, and many others is exploding: We now have TV shows that are not even “on TV.”

Although the way we now *receive* our “stories” (whether fiction, news, or reality programs) has changed, along with the ways we consume them, we tend to forget that important aspects of their *content* arguably have not.

If anything, in some key respects stories have become even more formulaic and homogeneous, whether consumed in an interactive, selective, or virtual environment. Certainly today's expanded *technological* media environment provides more content-specific programs dealing with any number of life-related issues (weddings, divorces, courts, food, pets, etc.), as well as the traditional fictional "stories." And there is no question that certain venues are offering some programs of unusually high aesthetic and critical quality (at a price). There is more TV than ever before. But some common messages and lessons—regarding violence, victimization, gender, power, class, race, and much more—are remarkably persistent.

Moreover, cultivation remains most concerned about aggregate messages, and the question of what large communities absorb over time may be even more critical in a time of more fragmentation and less collective consciousness. The structure of the industry, with its relatively small number of media companies and less than diverse writers and producers, leads to the production of a massive flow of messages about the world, its inhabitants, and how things work that still follow established formulas for appealing to commercially desirable groups, despite a surface of novelty and innovation. The result is less diversity in content than meets the eye. Cultivation has always been concerned with the broad underlying elements of content and how audiences interact with these messages. Indeed, as Shanahan and Morgan (1999) noted, "the content of messages is more germane than the technology with which they are delivered" (p. 201).

Other new media, such as video games and social networking, are getting increased research attention, and some of them may benefit from applying the cultivation perspective to their already established research questions. To the extent that media such as video games are now narrative devices, even given their "open" narratives, cultivation is a reasonable possibility to bring to bear (as some have done; e.g., Chong, Teng, Siew, & Skoric, 2012; Williams, 2006). On the other hand, when the Internet is used to read e-mail, check a friend's Facebook status, upload a photo to Instagram, blog to Tumblr, or tweet, something else is happening, a process more akin to interpersonal communication than to the consumption of mass-produced stories. The day-to-day content we encounter on sites such as Facebook, Twitter, and YouTube—and the content that we ourselves generate and upload to these sites—may not be directly relevant to the traditional model of cultivation, with its emphasis on fictional narratives. Nevertheless, all this new content contributes to the aggregate of imagery seen today. Of course, we all build and consume narratives online that are not fictional in the traditional sense. Existing theoretical models need to be extended to consider the ways in which our new social media environments (and the shifting communities

they give rise to) may intersect with and either bolster or short-circuit the cultivation process.

But watching broadcast or cable programs on the Internet is still fundamentally “watching TV,” as is watching original online programming that appears on neither broadcast nor cable channels. New “Over The Top” services that offer streaming access to individual broadcast or cable channels or small bundles and that bypass broadcast, cable, and satellite delivery entirely further extend the concept of “TV.”

Message system and cultivation analysis thus must begin to assess the more general content of new digital sources of programming—particularly original online programming produced by Amazon, YouTube, Netflix, and so on—to determine if their messages present the same values and elements that we have consistently found in broadcast and cable television programs. Nevertheless, given the close ties of web sites with media-related industries and the phenomenal growth of online video, it seems reasonable to posit that those whose “entertainment” is now tied to computer technology will receive more traditional than nontraditional messages about the world and its people, even including what they see on nonfictional channels and services such as the Weather Channel and the Food Network that increasingly include violence and negative competition in their programming. Likewise, with so many venues and platforms for viewing, people are spending much more time with media than they ever did. As such it seems reasonable to posit that evidence for cultivation will still remain.

“Mere” technological change need not mean much for cultivation; whether a program is received on a tablet or a giant wall-screen (or some device we can’t even imagine yet) is at most a secondary consideration for the cultivation theorist. But we need to know if *today’s* (and tomorrow’s) new media are offering more meaningfully different and diverse messages than did *yesterday’s* new media in terms of their underlying lessons about life and society. If not, then the primary question for cultivation will still be whether massive, long-term, common exposure is occurring, and what consequences that has for viewers’ beliefs about social reality. If the messages they provide have not changed fundamentally, then cultivation, as an explanatory model, will be as relevant today—and tomorrow—as it was 50 years ago.

### Measuring Television Exposure in a New Media Environment

In Gerbner’s original formulation, television exposure is measured by assessing overall amount of viewing, typically asking how much television is watched on an average day, and not what specific programs or genres are viewed. “Classic” cultivation analysis is thus concerned with the long-term

and long-range effects of living with television *in general*. However, the new media environment certainly creates important methodological challenges for this research. Where at one time we could comfortably rely on exposure to “TV” as a neat proxy for a person’s immersion in fictitious stories—with the strong likelihood that most “heavy viewers” were indeed being exposed to pretty much the same messages and lessons—those days are over. Exposure to network TV is increasingly becoming focused on an older demographic, as those who understand the complete media ecosystem don’t want to be tied down to “appointment viewing.” Although broadcast TV still generally harbors the largest single audiences for most programs, this is already changing, with cable programs such as *The Walking Dead*, *Duck Dynasty*, *The Bible*, *Breaking Bad*, and others increasingly outperforming broadcasters, especially among younger audiences.

With some “viewers” now watching 6-second videos on Vine on their smartphones, others binge-viewing *House of Cards* on Netflix on a tablet, and others watching hours of cooking shows on a traditional TV set—among many dozens of other variations—what sense does it make any more to ask people how many hours they “watch TV” on an average day? Complicating things further, the spread of Internet-connected televisions and streaming devices (Chromecast, Roku, etc.) is bringing Internet content to many “regular” television sets.

With the potential disappearance of a simple single measure of TV exposure (one that we should note was never uncontested), what is the likely substitute? Emerging media technologies may themselves provide a possible answer. Because people now consume mediated stories in environments that are more-or-less trackable and addressable, it seems that a likely move would be to gather digital records of exposure from willing participants. Much in the way that Nielsen once mainly used diaries to gather records of people’s remembered and self-reported exposure, Nielsen, Tivo, Rentrak, Comscore and others are now also developing digital viewing records that provide second-by-second information about what a person is watching whether on cable, on TV, on a DVR, laptop, tablet, and so forth. These records are currently largely proprietary, but it seems likely that future technology will make it easier for people to track and share their own viewing, providing researchers with more accurate and detailed measures of exposure than we have ever had. (For an analogous example, take a look at the viewing record stored by your web browser’s history feature.)

In the spirit of the way much of the Internet works, these records at the scale of “big data” would be an extremely useful addition to the cultivation arsenal. Social sharing of TV experiences will also be a likely source for acquisition about what people are watching. For example, on their website, Nielsen now reports Twitter Ratings—numbers for the daily top five and

weekly top 10 tweets about TV shows—and Facebook is already tracking the viewing of TV shows on mobile devices (and sending data on the viewer's age and sex to Nielsen).

Thus, one possibility is that the independent variable in cultivation would change from a simple self-report about hours of TV viewed (or even genres viewed) to something far more detailed gathered from online records. This would be a fluid and dynamic measure that could be tracked across time and technologies. In the spirit of Riddle's (2012) ideas about measuring lifetime exposure, a dynamic record of viewing history would provide a very potent measure of one's immersion in stories across a lifetime of viewing. However, the self-report would still also be likely to be useful, to tap into what people still see as "TV" in the new environment. From the cultivation perspective, it's all "TV"—but that would take a bit longer to explain to respondents.

### Do Heavy Viewers Still See More of Everything?

Even if cultivation can more successfully capture people's viewing across different platforms, it will still face the crucial question of whether people are seeing more "different" things than they used to. In the "old days," one could not *be* a heavy viewer of a single specific genre; with just three networks and a few independent stations (at most) available, and with almost all prime-time programs consisting of scripted sitcoms (mostly about families) and dramas (mostly about police, lawyers, doctors, etc.), anyone who watched 4 or more hours a day *had* to see more of everything. Thus, the notion that *how much* people watched was far more important than *what* they watched was fundamental to cultivation theory. We might imagine that the "traditional" assumptions about massive exposure to generic content might be no longer tenable. It's certainly possible now for "heavy viewers" to be watching vastly different types of programs; but it's also possible that they still see more of everything because content tends to follow certain themes and redundant story lines. We just don't know, and we need to.

Over the years, numerous researchers have questioned whether exposure to specific *genres* of media messages should be a critical component in understanding the cultivation phenomenon and associated effects. Some of these researchers believe that cultivation research should focus on specific genres of programs because they assume that different types of programs present diverse views of the world and cultivate distinct conceptions of social reality (Cohen & Weimann, 2000; Grabe & Drew, 2007). There are some compelling examples of possible genre effects. These include the idea that viewers' conceptions about fear and violence are the result of viewing crime-related programming (Holbert, Shah, & Kwak, 2004). Similarly, sex-role stereotypes and orientations toward marriage and romance may

show divergent relationships with exposure to specific genres compared to with amount of general viewing (Segrin & Nabi, 2002; Ward, Merrywether, & Caruthers, 2006). For views about race, there is also evidence that genre matters (Busselle & Crandall, 2002).

Yet, the notion that exposure to specific media genres is more important than overall amount of viewing goes against the basic tenets of cultivation theory. However, this has not stopped numerous researchers from violating this tenet, and the practice seems certain to continue. So there is the question of how to resolve this particular disagreement. Gerbner, for example, believed that exposure to different or specific genres of television raised research questions different from those of cultivation. He never claimed that all types of programs were completely identical in content but rather that certain patterns and lessons appeared across a number of different genres, that the same viewers watched them all, and that many genre differences were complementary.

We think most researchers would be open to the idea that cumulating data about exposure to genres alongside data about general exposure would be useful. Clearly, again, viewers can now be heavily exposed to very specific, and very diverse, genres of their choice. In fact, with more granular data of the kind just mentioned, there might be a greater ability to resolve what has heretofore been a philosophical question. Without devolving into pointlessly reductionist studies of, for example, the influence of the Golf Channel on attitudes about golf, we agree that data about significant genres are really just about different kinds of narrative, a topic that has always interested all cultivation researchers.

Bilandzic and Busselle (2012) argued that “the quality of genre-specific cultivation research depends on our ability to conceptualize and articulate the content of a genre” (p. 262). This allowed them to develop a model of genre cultivation that is congruent with notions of television’s institutional role as a source of consistent cultural stories. They pointed out that viewers come to expect certain pleasures from the genres they prefer; this in turn means greater engagement and immersion in the narratives of those genres, producing the kind of “transportation” that enhances cultivation. These arguments allow for a genre-based approach to cultivation analysis that still sees television as a source of consistent ideological messages even while recognizing that the media environment allows for exposure to far more real diversity than it did in 1975.

Still, for us at least, the critical issue would still be not to lose sight of the overall aggregate *system* of messages that exposes everyone to an “essentially coherent structure of conceptions about life and the world” (Gerbner, 1990, p. 256). Even though our metaphor may be tiring, we have argued that it is the “bucket, not the drops” that matters most in cultivation research

(Shanahan & Morgan, 1999). Whatever contributions specific genres may make to conceptions and beliefs take place in a broader symbolic environment, and we encourage researchers to also examine those aggregate patterns. Too often, studies look at the impact of watching some genre on some attitude and assume they are observing the independent contribution of exposure to that genre, but most viewers still watch more than one genre. Although viewers may learn a lot about doctors from medical dramas, messages about doctors (perhaps contrary, perhaps congruent) also appear in sitcoms, police shows, reality shows, and many other genres. New (and more precise) measures of viewing should actually allow us to make these sorts of overall versus genre comparisons more open to systematic empirical assessment. Whether this reveals a way to tie cultivation to more specific narrative "doses" will be an empirical question for the future.

### New Kinds of Studies

As we have seen, the independent variable of cultivation may change, actually bringing with it a more dynamic, longitudinal look at the stories, messages, and lessons viewers consume. Naturally, then, it would make sense to suppose that new forms of measurement would also emerge on the side of the dependent variables. Whereas the typical forms of collecting information from individuals on surveys would continue, one could also imagine, again from the realm of "big data," large aggregate summaries of populations on various kinds of items.

A challenge would be to yield data similar to what has been used in the past. First-order measures, such as beliefs about how violent the world is, could be framed as collections of statements from large aggregates about perceptions of violence, for instance. Simple word count frequencies of relevant terms ("gun," "murder," "shoot") could provide evidence of the extent to which these phenomena inhabit our collective consciousness. In the same way, second-order measures (beliefs about the world) could be inferred. Twitter or Google, for instance, offer large aggregates of content data that could be used as discourses to infer population feeling. Using computer-aided content techniques, analysts could bring forth aggregate trends in opinion that might be explained by changing patterns of content (or stability of content, which is more likely from a cultivation perspective). Although there have been a few attempts to look at cultivation longitudinally, most of these have been hampered by repeated surveys that ask questions at yearly intervals at best, and in which the same questions are not always asked. Obviously there would be new problems and challenges with these kinds of studies (How do we connect any variations in trends in opinions and beliefs revealed by "big data" with exposure to TV as opposed to

social media, news, or a plethora of other potential information sources?), but there are also exciting possibilities.

Thus, in addition to the “orthodox” research model in which individuals’ attitudes are compared to their TV use, we may find that “big data” aggregates also offer useful new avenues. Such aggregates have been used quite frequently in agenda-setting research but have yet to become common in cultivation, most likely due to the cumbersomeness of collecting aggregate data. Keeping in mind that content data will also be likely to be studyable in different ways, many different kinds of hybrid forms of data analysis may be possible. Romer and Jamieson’s (2014) time series analysis comparing year-by-year changes in the portrayal of violence on television with shifts in public perceptions of local crime rates and fear of crime from 1972 to 2010 is a clear step in this direction. Studies can also include controls for other aggregates of media use, including those might “threaten” television the most: mobile, social media, other uses of the Internet.

We should also keep in mind that cultivation has always felt somewhat hampered by available data and data-gathering techniques. Knowledge of how people watch television has been sketchy at best. Self-reports of time spent viewing have been interpreted in the most general of terms, for example, we assume that most of those who say “four hours a day” probably watch more than most of those who say “an hour a day.” Correlations taken at a given slice of time have been rightfully criticized for various reasons. But, within the limitations of the various techniques, it has been seen as important not to reduce television viewing to a simple experimental stimulus, and to say something about it at a more holistic level, in terms of exposure over long periods. We see a move toward this type of explanation as one of the opportunities within the many challenges posed by the new media structure.

## CONCLUSIONS

Many predicted that the spread of cable and the VCR would mean the end of cultivation. It didn’t turn out that way. As cable professed to provide “new” and seemingly more diverse programming for viewers, it actually also ratcheted up violence and sex levels beyond that of broadcast network offerings of the time (Shanahan, 2012; Shanahan & Morgan, 1999). In an early study, Morgan and Rothschild (1983) found even stronger associations between amount of exposure and sex-role stereotypes among those who had cable in their homes. Similarly, Morgan, Shanahan, and Harris (1990) found that rather than detracting from cultivation, the VCR actually served to amplify cultivation, by allowing heavy viewers to watch “more of

the same.” Dobrow (1990) found that those who typically watched more television used the VCR to extend their viewing habits, whereas lighter viewers became even more selective in what they chose to watch. Likewise, Perse, Ferguson, and McLeod (1994) found that those who spent more time watching videotaped movies expressed greater interpersonal mistrust than those who watched less. In short, cable and the VCR provided heavy viewers with higher doses and intensified versions of traditional network fare. But this scenario had viewers essentially watching together. What does it mean for interpersonal mistrust that today people are “watching” at the same time but more or less watching “individually” because they each watch something different on their own device, such as a tablet or phone?

Even as we are now seeing a remarkable new generation of ways to expand television viewing, we are guardedly sticking to the idea that even this will largely mean “more of the same.” We are not suggesting that the Internet and other delivery vehicles are just another version of cable television. Rather, we are calling for caution and, of course, data in the attempt to answer whether new media vitiate the underpinnings of cultivation as it was developed in the 1970s. Only a few years ago, we argued (Morgan & Shanahan, 2010) that even the Internet had not changed the fundamental tenets of cultivation. But five years is now a long time in the evolution of media. So although the Internet has actually *increased* the audience for the traditional broadcast networks (through sites such as Hulu and YouTube), other non-network alternatives continue to spring up. Still, though, mass-produced commercial story-telling predominates. For us, it is still reasonable to look for cultivation, even if those “other” screens are now mobile and programs can now be watched more or less at will. New technologies have made it easier to watch what, when, and even where we want but, at the same time, they allow us to watch *even more*. Even though there are ever more channels to watch, it is now even more important to look at the common messages and lessons that permeate these images, because in today’s global media environment links between production and distribution are becoming ever more intertwined.

It is easy to exaggerate the consequences of technological change. “...The more things stay the same” is not just a cliché. Indeed, a recent inquiry into the continued viability of the concept of mass communication noted that “problems such as concentration of media, media-induced hegemony and lack of democratic access to the media still persist even in the new media environment” (Weimann, Weiss-Blatt, Mengistu, Tregerman, & Oren, 2014, p. 821). It goes without saying that the “problems” these authors cite are central to cultivation theory.

Gerbner never tired of quoting Scottish patriot Andrew Fletcher: “If a man were permitted to write all the ballads, he need not care who should

make the laws of the nation.” We may have exponentially more “ballads” now than ever before, along with endless ways to hear them. But they are still produced and distributed by a remarkably small handful of corporations. Even with our tendency to recall “new media” that were not as new as they seemed, we need to draw attention to one possibility. Sometimes change *is* cataclysmic. If the new technological developments in media also represent a change in the basic social fabrics that they serve, cultivation might be in for a rougher ride (and the name of this journal might need to change). Can we speak of “mass society” in an era in which mass communication forms are being changed beyond recognition? If we have evolved into a “post-mass” society, do any of the deeper theoretical notions that spawned cultivation still hold? Having discussed the fundamental assumptions of cultivation, and having described some key changes in the media environment, we can now return to the basic “new state religion” principles that Gerbner outlined, to see whether these conditions still hold in a radically changed social and media structure.

Concerning people’s overall attachment to television in terms of time spent, we think this condition still basically holds, although one can quibble about how we would define “TV” these days. Clearly, people watch stories on screens even more now than they ever did, as Nielsen’s quarterly Total Audience Reports show that use of new technologies is more likely to be added on to than to replace traditional live television viewing. The 2015 report for Q4 of 2014 shows that we are watching about 150 hours of live TV a month, compared to about 15 hours of time-shifted TV, 5 hours of watching a DVD or Blu-Ray device, 10 hours of online video, and less than 2 hours of video on a smartphone (Nielsen, 2015). To be sure, alternatives to traditional TV viewing are on the rise—and causing seismic shifts in the industry—but the time we spend watching programs live on a traditional TV still dwarfs these other options. More critically, although the device we watch on may be vitally important to advertisers, it may not matter much to cultivation researchers.

As well, the convenience of TV is still unchanged, with the proviso now that technology actually *aids* the convenience so that people can get more of what they like fed to them on a personalized stream matching their tastes. Technology can now even offer suggestions to viewers based on their past viewing, or that of their friends. Similarly, TV still has few basic literacy requirements. There are some technological skills required to master some new delivery mechanisms for TV, but clearly video stories still retain maximum impact to audiences of all levels of reading ability.

On other points, though, Gerbner’s rubric may be breaking down. Although it still seems reasonable to us that video stories still stand in for what fairy tales used to do (and we note the fascination of TV with old

legendary and fantasy genres as grist for today's narrative mill), the phenomenon of most people hearing common stories, learning shared lessons, and acting in comparable and collective ways based upon those messages seems to be fading. For cultivation theory, so dependent on ideas about the broadly shared "mainstream" of culture, the ramifications could be important.

As well, clearly the homogeneity of viewing demographics is also starting to break down. Although TV was never *completely* homogeneous in terms of its story system (e.g., children used to get their own Saturday morning viewing block, although that was a small portion of what they watched), clearly video stories have now multiplied greatly in terms of who they are aimed at, and audiences have fragmented into a vast array of distinct and shifting splinters, including numerous programs and channels for children of different ages and many other demographic configurations. Here again, the implications for the very concept of "mainstream culture"—and the process of mainstreaming—need to be assessed, conceptually and empirically.

Finally, as networks for ethnic minorities (and practically any other minority) have sprung up and become profitable, these groups have better chances to see themselves reflected in televised culture (although it should be noted that many of these are subsidiaries of dominant media conglomerates). Of course, this specialized fragmentation can sometimes lead to concerns that different groups will polarize themselves based on selective exposure to "their own" media content, but clearly the situation is now different from when Gerbner wrote.

It can be hard to notice when the tide has shifted. Potentially irrevocable changes for the ideas initially outlined by Gerbner will continue to need to be inspected by those wishing to study cultivation. If these were the six pillars on which cultivation theory was built, then the ground under at least some of those pillars is shifting. Based on previous experience, we argue it still makes sense to think about the relationships of large groups of people to story systems, and of course everything is still produced within the confines of commercial intent that so concerned Gerbner. He repeatedly argued that media attract, organize, and package—that is, "cultivate"—publics, transforming them into commodities (audiences) that are sold to advertisers. In many ways, new media perform that function even more efficiently.

Perhaps the greatest challenge will come to the idea of mainstreaming. This notion, just explicated, seems compelling when there is a dominant, central, powerful current toward which all groups and subcurrents are pulled by the messages of television. The idea of mainstreams is somewhat less appealing from the standpoint of social theory. It may be somewhat ironic that Gerbner and colleagues were developing the idea of mainstreaming just after countercultures were starting to emerge from under the shadow of mass-produced storytelling. From the 1960s–1970s onward, the tenuous but

real status of alternative ways to talk about the world in cultural products is undeniable, but these were arguably never strong enough to overturn the dominant forms of narrative social control. Now, with several or many (or no) mainstreams, the time for revising the original idea of mainstreaming may also be coming, if it's not already here.

In the end, though, more than anything, cultivation is about the cultural role of storytelling, even in a more complexly mediated world (as opposed to, somewhat more simply, a mass-mediated world). Although he became most well known (academically and popularly) for his studies of television violence, Gerbner's original core notion of cultivation—as a process of interaction through messages that reproduces the terms and relations on which those messages are premised—both predates and is larger than his emphasis on television. He saw culture as a system of messages and images that regulates and reproduces social relations; cultivation, he argued, is what cultures do. “People learn best not what their teachers think they teach or what their preachers think they preach, but what their cultures in fact cultivate” (Gerbner, 1963, p. 42).

Stories are still the magic that, as Gerbner argued, makes humans out of *Homo sapiens*. And media—if not simply “television” defined in a very narrow sense—will continue to tell us vast numbers of stories. Much of Gerbner's “new state religion” argument still seems relevant to us. Even with its new diversity, and even if “video entertainment” or some other term or concept replaces “television,” it still “provides an organically related synthetic symbolic structure which once again presents a total world of meanings for all. . . . The pattern is formula-bound, ritualistic, repetitive. It thrives on novelty but is resistant to change” (Gerbner, 1977, p. 149). As we think about today's expanded and immensely complex media environment, these words still ring true.

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