

## **Audience Activity and the Third Generation of Television**

Elizabeth M. Perse

Department of Communication  
University of Delaware  
Newark, DE 19716  
302.831.8041  
[eperse@udel.edu](mailto:eperse@udel.edu)

Douglas A. Ferguson

Department of Communication  
College of Charleston  
Charleston, SC 29424  
843.953.7954  
[fergusond@cofc.edu](mailto:fergusond@cofc.edu)

Paper presented at the Broadcast Education Association annual convention,  
Las Vegas, April, 2003.

## **Audience Activity and the Third Generation of Television**

Walker and Ferguson (1998) pointed out that television has changed dramatically since it became part of the home media environment in the 1950s. In fact, Walker and Ferguson suggest that, with the integration of digital technology, television has entered its third generation. This third generation of television (TV3G) alters not only programming, structural, and economic aspects of television, but also alters significantly researchers' theoretical approaches to understanding audience behavior (see also Ferguson, 2001). The goal of this paper is discuss the role of audience activity in theoretical considerations of television's three generations. We conclude by drawing implications and suggesting research to consider the role of audience activity in television's third digital generation.

### *Audience Activity*

The uses and gratifications perspective was, in part, a reaction to mass society perspectives that viewed the media audience and passive and easily influenced by powerful media sources (e.g., DeFleur & Ball-Rokeach, 1989). Instead of seeing the audience as passive, uses and gratifications was based on the assumption that people were active when they selected and used the mass media and their content (Katz, Blumler, & Gurevitch, 1974). This notion of the active audience became a central tenet of uses and gratifications. Not only did this assumption justify the survey method approach to data collection, but it drew researchers' focus away from media content onto questions of why people use certain types of media content. Critics and research observations, however, led uses and gratifications researchers away from a uniform acceptance of audience activity. Instead, uses and gratifications now recognizes that audience

activity instead is variable: that people are active in different ways and at different times when they use the mass media (e.g., Levy & Windahl, (1984).

Activity now is seen as having several dimensions: Utility, or how and how strongly people are motivated to use mass media and their content; intentionality, or how much planning people put into their media use; selectivity, or how selective people are in choosing or rejecting types of media content; and involvement, or how much people are mentally or emotionally engaged with media content (Blumler, 1979; Levy & Windahl, 1984; Rubin & Perse, 1987).

Research building on this variable approach to audience activity has identified the links among dimensions of activity: although people are not uniformly active, there are patterns to different types of activity (e.g., Rubin & Perse, 1987). It is also clear that different reasons for using the mass media are evidenced in different types of activity: instrumental motives for watching television, for example, are associated with greater activity that ritualistic motives (e.g., Perse, 1990). Audience activity is also important to the study of media effects: different types of activity can inhibit effects; other types can facilitate effects (Kim & Rubin, 1997).

Most research that has focused on audience activity has considered audience activity associated with watching television. Since the mid-1980s, there have been significant technological changes to television that have an impact on how actively the audiences watches television (e.g., Lin, 1994; Perse, 1990). The goal of this paper is to consider the third generation of television, to suggest that a focus on audience activity will help understand the uses and impacts of the digital, interactive television generation.

### *Television's Three Generations*

According to Walker and Ferguson (1998; see also Ferguson, 2001), television has evolved during its first half-century. It has moved from a model adopted from the earlier dominant medium, radio, through a generation marked by rapid changes brought about by fairly rapid adoption of cable television, videocassette recorders (VCR), and remote control devices (RCD). Television is now on the verge of its third generation, marked by digitalization of the signal and two-way interactive connections between sources and receivers. Audience activity has had different meanings in each of these generations.

*Audience activity in TVIG.* Television's first generation was from the 1950s to about 1980: the network-affiliate model derived from radio. Television's first generation was marked by real-time viewing of programs on a few network-affiliated channels. As Ferguson (2001) points out, audience availability was greater than program availability, so "content was king." Although uses and gratifications researchers assumed that audiences were active, there was little direct evidence of that activity. Audience flow, channel loyalty, and inheritance effects (Webster, Phalen, & Lichty, 2000) could predict substantial amounts of the variance in audience behavior. That is, careful program scheduling could carry a more passive television viewer from one program to another throughout the evening. Programmers used strategies such as lead-in programming, or placing a program with a strong impact earlier in the schedule to "lead" viewers into the next program – a sort of inheritance effect: programs inherit the audiences of the shows preceding them. Or, programmers used "hammocking," or building an audience for a weak program by scheduling it between two stronger programs. Or, programmers use "block programming," or scheduling a series of programs with similar themes or audience appeal

together. All these strategies worked well in TV1G because audiences tended to watch only a few channels (the three networks enjoyed over 90% shares in the 1970s), and tended not to change channels a good deal.

During the first generation of television, audience behavior could be accounted for by a few variables (Webster et al., 2000). Audience availability was a first important variable. Webster and his colleagues point out that availability has little to do with television programming, but responds to seasons of the year, days of the week, and hours of the day. People watch more television in the winter than the summer; they watch more during the week than on Friday or Saturday nights, and more people watch television during its prime time than during the daytime.

A second important variable in explaining audience behavior in TV1G was the structure of the television system. That is, access to channels determines viewing of the programs on those channels. During this era, the network affiliates had the largest audiences primarily because they had the best coverage; these were typically located in the VHF band, which, for technological reasons, got better reception. UHF channels (usually independents in TV1G) had coverage problems and siphoned off little of the network affiliate audience.

A third important variable dealt with the programming techniques. Programmers use knowledge about audience flow to “manage” audience choice. Channel loyalty and inheritance effects could predict a good deal of audience behavior.

During this era, certainly individual preferences for certain programs made some impact on individual program choice; sports enthusiasts could seek out specific events and news viewers could limit their exposure to informational programming. But, programming was designed to attract mass audiences, so audience activity, overall, was limited in intentionality and selectivity.

Viewers did not need to make elaborate plans to find a particular favorite show; there were three channels and fairly standard weekly schedules. The three networks had clear identity and written program guides made it easy to locate preferred programs.

During this era, audience activity was expressed primarily in utility, or strength and direction of motivation. That is, viewers were either strongly or weakly motivated to watch certain programs for different reasons. So, uses and gratifications researchers were able to identify connections between motives and program choices (e.g., Rubin, 1981; Rubin & Rubin, 1982). Viewers strongly motivated to seek information from television, for example, were more likely to watch news and magazine-type programs. Involvement was another dimension of audience activity that was important during this era; although this was not well researched, people could vary in the amount of mental effort they directed toward watching certain programs.

*Audience activity in TV2G.* Television's second generation is the growth of the multichannel television environment. The changes in UHF regulation led to an increase in the number of local stations – from 706 in 1975 to 1062 in 1989 – a 50% increase (Walker & Ferguson, 2000). Although cable television had been available in some locations since the late 1940s, in the 1980s, cable penetration exploded along with the birth of the superstations and the cable networks. The 1980s was also the beginning of the end of the network oligopoly – Fox was the first viable fourth network, followed by others. All these increased television's channel offerings from three or four channels to dozens. At the same time, the popularity of video games and videocassette recorders meant competition for television's monitor. There were real alternatives to watching television's programming.

With the multichannel environment of TV2G came specialized, niche channels. The remote control device encouraged channel surfing and sampling. The second generation of television was no longer bound by principles of audience flow; even passive viewers could easily become more active. Even the technologically impaired could master remote control devices and use the VCR to watch tapes.

In television's second generation, the concept of audience activity began to have practical as well as theoretical meaning. Cable channels, videocassette recorders and remote control devices allowed people to be more active along all dimensions. Audiences could find more direct uses of television programs: Because of niche programming, people could be differentially motivated to watch different types of programs (e.g., Perse, 1998). Planning could take active forms: The active audience could be intentional and plan to record and time shift a program (e.g., Levy & Fink, 1984). Selectivity was eased: The active audience could use elaborate search strategies with remote control devices to find the program to gratify motives and interests (e.g., Eastman & Newton, 1995) or turn away from programs that are not gratifying (Perse, 1998). Audiences could respond easily to shifts in mental or emotional engagement with a program by changing away from boring or unsettling programs (Perse, 1998).

Predicting audience behavior in TV2G was still based on structural features of the television environment: time of day, time available to watch television, and number of channels available (Webster et al., 2000). But, because of cable's increased channel offerings, awareness of channels began to be an important predictor of what people would watch. Channel repertoire, or the number of channels normally watched, became an important concept (Ferguson, 1992;

Ferguson & Perse, 1993). And, along with niche programming came a greater emphasis on gratifications sought from television and personal taste and preferences.

Research conducted during TV2G gives a clear snapshot of audience activity of that era. The technology of TV2G was associated with increased activity: VCR and RCD owners had greater channel repertoires (Ferguson, 1992), presumably because it was easier for them to sample cable offerings. Greater intentional program selection and channel changing were also linked to higher channel repertoires (Ferguson & Perse, 1993). On the other hand, the limits on channel repertoires (about a dozen) suggest that people were selective in the kinds of channels they regularly sought out and reinforce the notion of genre loyalty. The kinds of motives people had for watching television were associated with how active they were. Instrumental motives were linked with more intentional planning to watch specific programs, with greater use of program guides and less channel changing, and more cognitive and positive emotional responses to programs (Perse, 1990; Perse, 1998).

There was a twist to audience activity, however. Whereas theory had suggested that instrumental, content-oriented television viewers would be the most selective (e.g., Rubin & Perse, 1987), in TV2G, ritualistic viewers were the active channel changers. Instrumental viewers might use the RCD to find a specific program or to watch two programs at the same time (e.g., Walker & Bellamy, 1991), but the unintentional ritualistic viewer used the RCD even more often. Ritualistic viewers changed channels to find out what was on television (e.g., Eastman & Newton, 1995), to get away temporarily from commercials (Walker & Bellamy, 1991), to annoy others (Walker & Bellamy, 1991), and to add stimulation to their environment (Perse, 1996). Changing channels increase the pastime and companionship gratifications of television viewing

(Perse & Ferguson, 1993). TV2G enabled activity for all types of television viewers; there was a signal that technology could change passive to active viewers.

### *Television's Third Generation*

The third generation of television is upon us. Kang (2002) asserts that this age arrived in the late 1990s. Technologies such as personal video recorders (PVRs), video on demand (VOD), and technologies that connect television and the Internet, such as WebTV, ushered in a new era of television. TV3G is marked by four major features: higher definition television pictures and sound, digital compression and increased number of channels, digital storage and greater control over program viewing, and interactivity. This new generation of television will not only change our home media environment, but it will change the emphasis of our theories to explain program selection, uses, and effects. TV3G leads to important implications for audience activity and suggests several possible directions for future research.

### *Screen Size and Stereo Sound*

Television screens were quite small during TV1G; through the 1950s, screens ranged from about 9 - 14 inches. During television's second generation, screens became larger, increasing to about 21 inches in the 1970s, to 32 inches in the 1990s. Now, new sets have larger screens; it not uncommon to see screens larger than 36 inches; one in six households have screens 40 inches or larger (Carey, 2002). Along with those larger screens comes stereo sound and DVD players. Even if households aren't receiving digital television watch movies with crisp images and realistic sound. And, although high definition television (HDTV) has not been widely adopted, almost 5 million HDTV sets have been sold, which have the ability to display digital-quality pictures and

sound (Taub, 2003). TV3G is marked by an increase in vividness, or the “ability of a technology to produce a sensorially rich mediated environment” (Steuer, 1992).

Allen (2002) explains that these larger sets can affect the audience because there are direct effects of screen angle and size: “As the screen angle gets larger, the story impact gets greater . . . the audience feels less like TV watchers, and more like participants in the action on the screen.” Although this immersion has been limited only to theatrical film viewing, with a large enough television screen, it is possible that audience involvement in television viewing could increase.

This is the major potential impact of this aspect of TV3G: an increase in the involvement dimension of audience activity. We know that large stimuli elicit an orienting response (involuntary attention) and arousal (e.g., Detenber, & Reeves, 1996). So, larger screens, especially those that display higher definition images, might trigger orienting responses, more involuntary attention to the screen, and stimulate more arousal. It might be more difficult, then, to ignore programming on large, high definition screens. Television viewing in home theaters might change television viewing from a secondary activity, accompanying other activities and chores, and might become a primary activity, associated with heightened attention. Audiences might become more mentally and emotionally involved in the programs.

This heightened mental activity could have a variety of potential implications. It might be linked to effects that grow out of attention to media content, such as learning (from programs or commercials). Or, the arousal associated with large images might lead to greater emotional responses to programs, so that sporting event might become more exciting; tear-jerkers might become more engaging. As attention has been negatively linked to channel changing (e.g., Perse,

1990; 1998), these more involving television might be associated with less channel surfing and perhaps more attention to commercials embedded in the programs.

### *Digital Compression*

The widespread availability of digital broadcast satellite and the roll-out of digital cable has increased dramatically the number of channels available on the home television. Through digital compression, these technologies make “500-channel television” a reality. Along with digital satellite and cable come on-screen interactive program guides (IPG) to help viewers navigate through the hundreds of channels. These IPGs offer viewers new tools to be selective television viewers.

Kang (2002) summarized several aspects of the IPGs that make them useful for subscribers of multi-channel services. First, the scrolling cable guide is not at all useful when systems have hundreds of channels; viewers cannot control the pace of the scrolling and it can take too long to search all available programs. So, the IPG allows viewers to control the display: by channel number, by time of day, or by genre. And, IPG allows viewers to search for favorite programs by title.

There are indications that IPG increase audience selectivity. Kang (2002) found that IPG users reported higher digital cable channel repertoires. Use of interactive program guides allow viewers to find programs that they like on channels they would not typically watch. Interactive program guides appear to reduce the importance of channel loyalty and allow people to find appealing programs on channels with which they are not familiar.

Interestingly, Kang (2002) found that guide use was positively linked to ritualistic viewing motives. Perhaps ritualistic viewers who also subscribe to digital or satellite cable find it difficult to channel surf through hundreds of channels to find something to watch. The use of the IPG suggests that even ritualistic viewers might be more selective if they have the tools available to ease their search for programs.

*Control over program viewing:* Personal video recorders (PVRs) bring advantages of digital program delivery to their owners, even if they don't subscribe to digital services. PVRs convert and record television programming digitally, storing it on large hard drives. These devices have large storage capacity – about 80 hours. Initially PVRs were marketed as an alternative to VCRs, but their other features have led their owners' enthusiasm for the machines.

PVRs allow viewers to “pause” live television, so they are not constrained by the schedule of television networks. PVRs also allow “instant replay” of television; viewers can rewind and watch interesting scenes. PVRs also bring interactive program guides to their viewers, so that programs can be selected more easily. And, some devices allow viewers to pass over commercials imbedded in the programs they have recorded. Although the ownership base is still small, owners are enthusiastic.

Personal video recorders are still not widely adopted; about 9 million households are expected to own them by the end of 2003; that number will more than double to 19.4 million by 2004 (ITV Marketer, 2002). The research on the early adopted of PVRs, however, suggests that this is a device that enables increased audience activity.

PVR use is associated with increased television viewing levels and greater satisfaction with television viewing (C Cubed, 2002). This suggests that people are more motivated to watch television when they own PVRs. Research on very early adopters of PVRs found that use of the devices' specialized features was associated with greater entertainment, relaxation, and pastime gratifications (Ferguson & Perse, 2001). Future research could explore how owners use their PVRs. That is, what motives for watching television are enhanced by ownership of these devices? Do the motives for watching television differ for owners and nonowners of PVRs?

The intentionality dimension of audience activity also seems to be altered by ownership of personal video recorders. In TV2G, intentionality was defined as making arrangements to watch a particular program. PVRs eliminate almost all the need to make special arrangements. Features such as Tivo's Season Pass automatically records all the episodes of a series, even if the schedule changes. Tivo's WishList automatically records programs that feature a favorite actor, director, or theme. In fact, 65% of PVR owners rely only on the Season Pass to select the programs they will record. So, PVR ownership should be linked to lower levels of the intentionality dimension of audience activity.

There are several indications that PVR ownership will be associated with increased selectivity. The definition of selectivity is altered by PVRs, however. During television's second generation, selectivity was defined, in part, as program search (Heeter, 1985), where television viewers used remote control devices to find programs that interested them. PVR owners are clearly not selective in that sort of way; 60% report that they don't channel surf any

more to find programs to watch (C Cubed, 2002). Instead, they rely on the PVR to have programs waiting for them to watch.

Although PVR owners do not have to plan to watch their favorite shows, they do specialize their viewing to include more of their favorite genres. This definition of selectivity is one used in some early research on audience activity; selectivity defined as a large proportion of viewing time devoted to a certain genre (Rubin & Perse, 1987). PVR owners do demonstrate selectivity in genre loyalty; 65% report that they are watching more of their favorite programs and genres (C Cubed, 2002). In fact, a majority of owners (55%) report higher channel repertoires as a result of PVR ownership (C Cubed, 2002). Interestingly, however, because the PVRs recording is menu-based by program title, another 20% have no idea what channels they are watching; they rely on the PVR to find the programs across any channel.

So, PVR ownership should be associated with greater selectivity – not in program searching, but in being able to specialize viewing in favorite programs or in favorite genres. Coupled with the fact that PVR owners watch fewer program promotions than nonowners, this selectivity has implications. Research should explore how PVR owners find out about new programs to watch – selectivity before exposure. Research points out that 65% of PVR owners typically use the PVR interactive on-screen program guide (C Cubed, 2002). This reinforced the importance of the interactive guides as a gateway to television selection.

There is little information about how involved PVR owners are with their television viewing. There are indications, however, that the PVR increases mental and emotional involvement with programs. The PVR automatically records the program being watched,

allowing viewers to “pause” and rewind live programming. So, the PVR allows the viewer to control the pace of the program, allowing fewer interruptions. The cognitive response approach to persuasion suggests that when people can control the pace of the information’s presentation, they are more likely to become cognitively involved (Wright, 1981). So, the PVR should be associated with greater mental engagement – greater program involvement.

In all, personal video recorders do appear to be changing television viewing. Owners are enthusiastic and are changing some of their television habits. It also appears that these devices are altering how audiences manifest activity, before and after watching.

*Interactivity.* Interactivity is a concept with a wealth of definitions, many of which grow out of an interest in computer-mediated-communication, which has focused on person-to-person communication. Rogers (2002), for example, defines interactivity as “the degree to which participants using a new medium have a high degree of control over the communication process and can exchange information in a mutual discourse” (p. 50). Several other scholars offer definitions of interactivity that are applicable to the television viewing context. Three of Heeter’s (1989) dimensions of interactivity, for example, suggest that interactivity includes elements of viewer choice, requirements of viewer effort, and responsiveness from television’s form or content. Ha and James (1998) add that interactivity includes playfulness. Steuer (1992) provides a broad definition that can be applied to television: “the degree to which users of a medium can influence the form or content of the mediated environment” (p. 80). Integrating these, a useful definition of interactive television is television content that (a) allows viewers

control, or choices in form or content, (b) requires some degree of effort on the part of the viewer, (c) offers entertainment or other gratifications, and (d) responds to viewers' input.

Interactive television is still in its infancy. The single-screen model, where viewers can truly access additional information embedded in television programs, is available only in the few homes who subscribe to services that offer Web-enhanced television signals, such as WebTV or AOLTV. Other services, such as Wink, which is an interactive overlay offering embedded factual or promotional information, are available in some digital cable markets. Adoption of single-screen interactive television might be slow, but television is certainly moving toward other interactive models that include video on demand (VOD), two-screen interactive platforms, and viewer-involvement programs.

One benefit of digital cable systems is video on demand. This feature is an enhanced pay-per-view service. With digital on demand, subscribers "order" a movie or program from a menu. But, viewers have control over when and how to watch it. Each movie/program comes with a rental window. During that time (typically 24 hours), viewers can watch it as often as they want. Presentation is also controlled by the viewer, who can start, stop, pause, rewind, and fast forward at any time. The viewer can watch part of the movie/program, stop, and pick up again later on. The key benefits of this technology is VCR/DVD control without having to visit the rental store. Currently, though, VOD movies/programs are somewhat limited and the menus don't change as regularly as the rental options at the local video rental store. A variation of VOD is SVOD (subscription video on demand), where the

movie/program offerings of a premium channel are available at no additional cost to subscribers of the premium channel.

There have been several two-screen attempts at bringing interactivity to television viewing. Two-screen interactive television allow viewers with Internet connections to access “enhanced” content and to interact with the programs. ABC’s enhanced TV, for example, encouraged viewers to answer questions along with contestants on *Who Wants to be a Millionaire*. During the 2003 Academy Awards broadcast, interactive viewers could vote in polls, access background information, see “behind-the-scenes” action, and score points for correctly predicting winners. Two-screen interactive television takes advantage of the positioning of the home television and home computer in the family room, so viewers can interact with the television and computer at the same time (Morrison & Krugman, 2001).

Perhaps the most interesting interactive experiment is the asynchronous viewer input that is part of some of the reality programs. *Big Brother*, *American Idol*, *Married by America*, and *Joe Millionaire* all let viewers who call or text in select the direction of the program. These programs do not use complex technology to allow viewers to interact; nor are they synchronous. That is, viewers must wait until the next episode to see the results of their input. Still, these programs include the four aspects of interactive television: there are choices, viewer control, viewer effort, playfulness, and responsiveness.

Interactivity affects audience activity. Interactive programs might lead to new uses or gratifications sought from watching television – an involvement in interaction. The appeal of interactive programs might lead viewers to be more intentional and selective toward the

programs, especially for those viewers who want to find if their input has made a difference to the program's direction. Those are both directions for future research.

Liu and Shrum (2002) suggest that “active control” is a way to describe a dimension of interactivity. Active control is “voluntary and instrumental action that directly influences the controller’s experience” (p. 54). They further explain that active control implies that the goals and motives that people have affect directly the choices that they make. Although Liu and Shrum focus on Web advertising, their concept and proposition certainly is in line with uses and gratifications findings that reasons for watching television direct activity while watching (e.g., Perse, 1990; 1998; Rubin & Perse, 1987). Utilitarian aspects of activity, then, should influence if and how viewers take advantage of interactive aspects of programs.

Interactivity directly affects the involvement dimension of audience activity as well. That is, to take full advantage of interactive elements of television programs, viewers need to increase mental and/or emotional involvement with the programs. Carey (2002) points out that orientation to the television needs to change with responsive programs; television viewing can no longer be a secondary activity because of the need for heightened attention to the screen. Research suggests that some interactive experiences are associated with heightened affective responses (Calvert & Tan, 1994; Lang, Schneider, & Dietz, 1999). Interactivity in television viewing might also increase arousal, which might enhance the likelihood of emotional responses. Liu and Shrum (2002) add that the control aspect of interactivity requires mental engagement. They expect that users of interactive media should be more attentive to and cognitively involved with the content. Moreover, they point out that control could have an impact on some

outcomes of watching interactive programs. They expect that those who take advantage of interactive elements should learn from the content and be more satisfied with watching television.

### *Other Elements Affecting Audience Activity in TV3G*

Television's third generation other implications for uses and gratifications researchers. TV2G's increase in television channels gave rise to the "channel bug," or the logo placed in the lower corner of the screen to "brand" the channel (and to let viewers know what channel they were watching). This bug pales in comparison to the clutter on TV3G's screens. New sets have picture-in-picture capability, so that viewers can monitor two stations at the same time. Many channels' pages resemble Web or interactive television sites. The Bloomberg Business News channel, for example, claims to present many times more data than other business news channels. But, it does it with a cost – a video window with three text boxes presenting different information. During the Iraq war, news coverage is also very dense, with video images often behind a news anchor, with textual crawls at the bottom of the screen. Earlier news research suggested that screen clutter can impede attention and comprehension (Edwardson, Kent, & McConnell, 1985). Future research should explore how screen clutter is linked to viewer attention and involvement.

As televisions became more affordable, families quickly became multiset homes. This allowed greater selectivity with the niche programming offered by TV2G. Now, however, TV3G technologies are not typically available on all the household sets. Because of the extra cost associated with large screens, subscriptions to digital cable, and purchase of PVR hardware and subscriptions, in many homes these enhancements are available on only one set – the main

set of the household. So, families are beginning to watch television together again (C Cubed, 2002). A movement toward group viewing introduces some new questions. Are social interaction uses of television viewing increasing? Are escapist uses (watching television to get away from the family) declining?

Because many of the TV3G's enhancements are remote-control directed, how is control of the remote control decided? Males tend to be innovators with new media technologies (e.g., C Cubed), do they continue to control the remote even in digital cable, PVR, and interactive television households?

Many of TV3G's enhancements are text-based. Interactive program guides, for example, require that people be able to read program information; PVR's programming is menu-based; and single-screen interactive television relies on text. It is clear that this text has implications for activity and attention, but it also has implications for the orientation of the television in the viewing room. People might find that they need to move their furniture closer to the set to be able to benefit from the text-based material. As Ferguson (2001) wrote, TV3G might change the viewer from a lean-back to a lean-forward stance.

Uses and gratifications has considered the perceived realism of television content to be an important response to viewing motives as well as an antecedent to audience activity and media effects. TV3G's higher definition images, coupled with larger presentations, better quality sound, and improved special effects might enhance the reality of certain depictions. The ability to control and affect programming should also increase perceptions of realism. Future research

should explore if perceptions of television's realism change with the use of different technology and see how these changes affect utility, intention, selectivity, as well as involvement.

### *Conclusion*

Television form and content are undergoing great changes in its third generation. As an audience-centered approach to studying mass communication, uses and gratifications focuses on audience activity as a central way of understanding the uses and effects of mass communication. The spread of second generation technology, cable television, remote control devices, and videocassette recorders changed the first generation television audience from a more passive group of spectators, directed by principles of audience flow to a more selective, more active audience. TV3G technology, such as IPG, PVR, and interactive television should allow the audience to become even more active. Technology will allow people to find content to better match their needs and motives, so that they will be more gratified with their television viewing. Technology will minimize the need to plan, so intentionality will become less important. The variety of channels, coupled with technology to local specific favored programs and genres, will allow people to be ever more selective. It is quite likely that television will not longer be a passive, relaxing pastime, but one that is highly involving and arousing. The third generation of television offers mass communication scholars many opportunities for research, to uncover how new types of audience activity are reflected in program choice, program enjoyment, and various consequences of television viewing.

References

- Allen I. (2002). *Screen size: The impact on picture & sound*. Retrieved March 31, 2003 from <http://www.dolby.com/movie/s/m.in.0009.screensize.html>.
- Blumler, J. G. (1979). The role of theory in uses and gratifications studies. *Communication Research, 11*, 51-80.
- C Cubed, LLC. (2002). *The PVR Monitor: Wave III*. Author published.
- Calvert, S. L., & Tan, S. (1994). Impact of virtual reality on young adults' physiological arousal and aggressive thoughts: Interaction versus observation. *Journal of Applied Developmental Psychology, 15*, 125-139.
- Carey, J. (2002). *The evolution of TV viewing*. [Online report } Retrieved March 31, 2003 from <http://www.tvmeetstheweb.com/may2002/presentations/carey.doc>.
- DeFleur, M. L., & Ball-Rokeach, S. (1989). *Theories of mass communication* (5th ed.). New York: Longman.
- Detenber, B. H., & Reeves, B. (1996). A bio-informational theory of emotion: Motion and image size effects on viewers. *Journal of Communication, 46*(3), 66-84
- Eastman, S. T., & Newton, G. D. (1995). Delineating grazing: Observations of remote control use. *Journal of Communication, 45*(1), 77-95.
- Edwardson, M., Kent, K., & McConnell, M. (1985). Television news information gain: Videotex versus a talking head. *Journal of Broadcasting & Electronic Media, 29*, 367-378.
- Ferguson, D. A. (1992). Channel repertoire in the presence of remote control devices, VCRs, and cable television. *Journal of Broadcasting & Electronic Media, 36*, 83-91.

Ferguson, D. A. (2001, April). *A conceptual inventory of the three generations of television.*

Paper presented at the Broadcast Education Association annual convention, Las Vegas.

Ferguson, D. A., & Perse, E. M. (1993). Media and audience influences on channel repertoire.

*Journal of Broadcasting & Electronic Media*, 37, 31-40.

Ferguson, D. A., & Perse, E. M. (2001, August). *Enhanced television viewing with digital video*

*recorders (DVRs): Audience satisfaction in an asynchronous television environment.*

Paper presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Washington, DC.

Ha, L., & James, E. L. (1998). Interactivity reexamined: A baseline analysis of early business web

sites. *Journal of Broadcasting & Electronic Media*, 42, 457-474.

Heeter, C. (1985). Program selection with abundance of choice: A process model. *Human*

*Communication Research*, 12, 126-152.

Heeter, C. (1989). Implications of new interactive technologies for conceptualizing

communication. In J. L. Savaggio & J. Bryant (Eds.), *Media use in the information age:*

*Emerging patterns of adoption and consumer use* (pp. 217-235). Hillsdale, NJ: Erlbaum.

ITV Marketer. (2001-2002). *Personal video recorders: Market snapshot, projections and user*

*attitudes.* Retrieved March 31, 2003 from

[http://www.itvmarketer.com/deployments/pvr\\_deployments.htm](http://www.itvmarketer.com/deployments/pvr_deployments.htm)

Kang, M. (2002). Interactivity in television: Uses and impact of an interactive program guide.

*Journal of Broadcasting & Electronic Media*, 46, 330-345.

- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on gratifications research* (pp. 19-32). Beverly Hills: Sage.
- Kim, J., & Rubin, A. M. (1997). The variable influence of audience activity on media effects. *Communication Research, 24*, 107-135.
- Lang, A., Schneider, E. F., & Deitz, R. (1999, August). *Emotional experience and physiological arousal during violent video game playing: Gender, experience, and presence matter*. Paper presented at the Association for Education in Journalism and Mass Communication annual convention, New Orleans.
- Levy, M. R., & Fink, E. L. (1984). Home video recorders and the transience of broadcasts. *Journal of Communication, 34*(2), 56-71.
- Levy, M. R., & Windahl, S. (1984). Audience activity and gratifications: A conceptual clarification and exploration. *Communication Research, 11*, 51-78.
- Lin, C. A. (1994). Audience fragmentation in a competitive video marketplace. *Journal of Advertising Research, 34*(6), 30-38.
- Liu, Y., & Shrum, L. J. (2002). What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity on advertising effectiveness. *Journal of Advertising, 31*, 53-64.
- Morrison, M., & Krugman, D. M. (2001). A look at mass and computer mediated technologies: Understanding the roles of television and computers in the home. *Journal of Broadcasting & Electronic Media, 45*, 135-161.

Perse, E. M. (1990). Audience selectivity and involvement in the newer media environment.

*Communication Research, 17*, 675-697.

Perse, E. M. (1996). Sensation seeking and the use of television for arousal. *Communication*

*Reports, 9*, 37-48.

Perse, E. M. (1998). Implications of cognitive and affective involvement for channel changing.

*Journal of Communication, 48*(3), 49-68.

Perse, E. M., & Ferguson, D. A. (1993). The impact of newer television technologies on

television satisfaction. *Journalism Quarterly, 70*, 843-853.

Rogers, E. M. (2002). The information society in the new millennium: Captain's log, 2001. In C.

A. Lin & D. J. Atkin (Eds.), *Communication technology and society: Audience adoption and uses* (pp. 43-64). Cresskill, NJ: Hampton Press.

Rubin, A. M. (1981a). An examination of television viewing motivations. *Communication*

*Research, 8*, 141-165.

Rubin, A. M., & Perse, E. M. (1987). Audience activity and television news gratifications.

*Communication Research, 14*(1), 58-84.

Rubin, A. M., & Rubin, R. B. (1982). Older persons' TV viewing patterns and motivation.

*Communication Research, 9*, 287-313.

Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence. *Journal of*

*Communication, 42*(4), 73-93.

Taub, E. A. (2003, March 31). HDTV's acceptance picks up pace. *New York Times*. Retrieved

March 31, 2003 <http://www.nytimes.com>.

- Walker, J. R., & Bellamy, R. V., Jr. (1991). The gratifications of grazing: An exploratory study of remote control use. *Journalism Quarterly*, 68, 422-431.
- Walker, J. R., & Ferguson, D. A. (1998). *The broadcast television industry*. Boston: Allyn and Bacon.
- Webster, J. G., Phalen, P. F., & Lichty, L. W. (2000). *Ratings analysis: The theory and practice of audience research* (2<sup>nd</sup> ed.). Mahwah, NJ: Erlbaum.
- Wright, P. L. (1981). Cognitive responses to mass media advocacy. In R. E. Petty, T. M. Ostrom, T. C. Brock (Eds.), *Cognitive responses to persuasion* (pp. 263-282). Hillsdale, NJ: Erlbaum.

Audience Activity in Television's Third Generation

	Utility	Intentionality	Selectivity	Involvement
Large Screens				Increased Involvement: Heightened attention/ Emotional reactions
More Channels	More specific utility	More planning	Higher selectivity	
PVR	Stronger motivation	Less intentional planning	More selective Genre and program loyalty	Greater involvement because of audience control over pacing
Interactivity	Different uses	Greater appeal = more planning	Greater appeal = more selective	Greater involvement because of attention and arousal.