

Social Networking and the Active Audience

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Abstract

This paper examines new models and new methods for the study of new media communication, specifically the use of social networking sites like MySpace, Facebook, and Second Life. Source-based models of media communication have been slowly shifting to audience-based models for two decades, as users gained more control over content via remote controls, VCRs, online video, and digital video recorders. User-generated content (UGC) on websites such as YouTube has turned Berlo's SMCR model inside-out and social networking website MySpace has embraced UGC. No new data is presented here but a new method of cluster sampling is proposed as a means to study social networking sites. Implications of an active audience are discussed.

The study of media uses and effects has always been based on a sender-receiver model that was typically one-way with a delayed feedback loop. Effects research has privileged the sender and the uses-and-gratifications approach has favored the receiver. Mediated and unmediated messages are thought to originate and then disseminate. The Shannon-Weaver model, conceived by mathematicians and engineers, was adopted by scholars studying communication in the 1950s (Shannon & Weaver, 1949). Berlo (1960) adapted the model to the mass communication process, adding a channel between the sender's message and the receiver (SMCR). Models have come and gone but the old SMCR model has been conceptually enduring. Sources (senders) are often granted extreme power, while audiences have been widely conceived as passive.

Until the arrival of the internet, the one-way model paid scant attention to the power of the audience, sometimes called the active audience. Zillmann and Bryant (1985) described a wide range of purposeful activities, including "watching television intently" (p. 2). How intently or passively such viewing takes place is a thorny issue. Zillmann and Bryant insisted that the audience is "active" -- a word whose ambiguity is discussed below. They maintained that past difficulties in deciding the presence or absence of selective exposure "can be circumvented by determining whether or not exposure to the program or the segment was intended and/or was the primary perceptual activity during the time course of the program or segment [original emphasis]" (p. 5).

Blumler (1979) explained the confusion that has surrounded the concept of the active audience:

The notion of "the active audience" has conflated an extraordinary range of meanings, including those of utility (mass communication has uses for people), intentionality (media

consumption is directed by prior motivation), selectivity (media behavior reflects prior interests and preferences), and imperviousness to influence. (p. 13)

Blumler noted that, however it is conceived, activity is not an either/or matter. Blumler also stated that different media call for varying levels of activity. Hence, the new media environment may change the selective nature of watching television.

Levy (1983) presented the results of 271 Maryland telephone interviews, showing that the idea of activity is "best conceptualized as a range of possible orientations" which varies across time (p. 114). Levy and Windahl (1984) further explored the active audience concept and again identified two dimensions of audience activity. They used a typology of audience activity, developed previously by Levy (1983), from these two orthogonal dimensions. The first is a qualitative dimension where audiences are portrayed as being "selective," "involved," or in a "using" relationship to television (p. 53). The second dimension is a temporal one: It considers the audience before exposure, during exposure and after exposure. Nine types of activity are possible by crosstabulation, but the article examines only three: selective exposure-seeking (the intersection of "selective" and time before exposure), decoding and interpreting (the intersection of "involved" and time during exposure), and social utilities (the intersection of "using" and time after exposure). From this typology, they created a model of audience activity and gratifications. Using data from a study conducted in Sweden, they tested their theory defining "activity" as self-reported behavior, which would suggest attentiveness. They found that viewers can be considered active in at least two of the three conceptualizations of audience activity: that which occurs before and after exposure, but not during. Levy and Windahl supported the finding that different members of the audience "will display different types and amounts of activity in different communication settings and at different times in the sequence of communication"

(p. 74). This represents a compromise between a totally active audience and a totally passive audience. Levy (1987) did yet another study of audience activity as it related to VCR use.

Rubin (1984) found evidence of two types of viewing: ritualized (habitual or diversionary) and instrumental (intentional or goal-directed), confirming what Blumler said about audiences exhibiting both active and passive tendencies. Rubin noted the danger of portraying the active audience as superrational. Using a purposive quota sample of 300 respondents in two Midwestern communities, Rubin surveyed their motives for watching television, as well as their personal viewing habits, preferences and affinity for television. Rubin found that viewers make different distinctions for why they watch at certain times. Information seeking was not a consistent motive among the respondents. Furthermore, ritualized viewing was correlated with a high regard for television as a medium, whereas instrumental viewing seldom recognized the importance of the medium. The author cautioned "ritualized and instrumental television use may not be clearly dichotomous" (p. 76) and noted that the usual demographic variables were inadequate predictors for viewer categorization.

Biocca (1985) traced the phrase "active audience" to psychologist Raymond Bauer (1964) and argued that the concept of the active audience is trivial and exaggerated. He called the debate over active versus passive audiences a "theoretical tug of war" (p. 1). The author criticized Bauer's "declaration of audience independence" as a backlash against a mass culture theory reminiscent of Pavlov and B. F. Skinner (p. 5). In this sense, Bauer aimed "to reassert the sanctity of the individual by simply denying that mass society existed" (p. 7). Biocca dismissed the ability of respondents to honestly give self-report data. Furthermore, he questioned that an audience member becomes active merely by the "flicking of the dial or surveying the offerings" (p. 10). Calling the idea of the active audience essentially unfalsifiable, he ridiculed the active

audience theorist as having the motto "I think, therefore I am active" (p. 13).

Petersen, Bates, and Ryan (1986) studied the common notion that "heavy" television viewers (i.e., those who watch more than four hours a day) are a passive audience, assuming the stereotypic role of "couch potato." Using national survey data from 1982, they found that only 20% of heavy television viewers reported watching passively. The remaining viewers identified with one of six programming strategies (e.g., news, religion, sports). The authors predicted that the new media environment would probably bring about more selective viewing and that audiences would become increasingly active in deciding what and when to watch.

Walker and Bellamy (1989) described the active audience in terms of behavior related to the remote control device (RCD). Their basic assumption was that television remote control devices "require a high degree of activity if the user is to reap the benefits of the technology" (p. 4).

The study of the active audience took a small holiday in the 1990s but returned as a useful framework to study media on the internet.¹ The internet certainly invites greater audience activity, which entices heightened utility, intentionality, and selectivity. Simply put, there are limits to studying the active audience for network television, because viewers can only exhibit so much intent and selectivity in a realm of finite choices. The internet, however, presents nearly limitless choice, to the extreme case that audiences create their own content when there is nothing left to choose, even keeping web logs (*blogs*) of their tiny lives.

Social networking is not entirely concerned with choice, but offers a surrogate for relational communication. The diffusion of cell phones and text messaging and a "hook-up" culture among young people created a perfect storm for the creation of virtual congregations. In the case of Facebook, the age-old idea of a college directory with photos went online with the

merging of e-mail messaging and vanity homepages. Privacy has taken a backseat to friendship for many young users, who have found checking Facebook nearly as addictive as their cell phones. MySpace further merged several existing web ideas: online dating, vanity homepages, messaging, blogging, and user-generated content. Second Life enhanced the concepts by layering the 1990s concept of virtual worlds, allowing users to create new personae and a second chance to look different, accumulate wealth and property, and master personal flight. Advertisers have jumped on the idea, creating virtual spaces to reach online audiences (Dungeons and Dragons for the rest of us).

New Models

In the past few weeks, the broadcast networks are beginning to remind us that the function of affiliated stations is arbitrary and perhaps an accident of history and distribution. The senders never desired a network model but needed one to get the signals to a national audience. If it had been technically possible to erect a giant transmitter in NY or LA that would beam live program feeds to every home in the United States, there would have never been a need for a network or the affiliates that made it possible. Affiliated stations have been a necessary evil. Governments pretend that local service is the primary driver of the system, but actually it has been the programming content, expensive productions made inexpensive by mass distribution, that got people to upgrade their crystal receivers to expensive furniture. The national content was the heart of mediated communication and many would argue that it will always be thus. But networks won't need stations much longer. With the exception of programs that must air live, television will soon travel over high bandwidth wires. The television industry may merge with the motion picture industry, whose content is distributed

to audiences that pay to see it when they're ready. The internet will likely reorient the passive audience into an active audience in the same sense that moviegoers are more intentional and selective than viewers.

The vast number of media consumers are still accustomed to the old model of media content, so we can expect a gradual changeover, starting with the young, the affluent, and the educated – an advertising trifecta if there ever was. The key determinant will be to what extent the point-of-entry players (i.e., cable and satellite) promote the diffusion of DVRs and how quickly the networks abandon the affiliate system. In ten years, we can expect near domination of the viewing experience around high-definition content that intersects so well with computer-based content. If the cable remote has buttons for social networking, virtual worlds, and user-generated content (or that anything-else button that I have been predicting since 1997), and if broadband penetration reaches 80 percent, then adoption of new media will be rapid and passive audiences will negotiate rapid choice with the same zest with which they greeted the remote control device in the 1980s. It won't matter if there's "nothing on" because the anything-else button will take the viewer to online channels that offer new choices and new opportunities to connect with others.

Five years ago I presented a conceptual grid (see Table 1) for the three generations of television (Ferguson, 2002). The third generation predicted a customized world of homegrown choices that seemed likely at the time, based on surviving sites like www.atomfilms.com (but never quite expecting that it would so rapidly morph into YouTube). The theory section of that modest but award-winning paper predicted a world that was asynchronous, lean-forward active, no audience flow, subscription-based video-on-demand, instrumental, audience-centered, studio-centered, cyber-centered, loyalty-driven, and based on an interactive model in Figure 1.

Other models abound, and one of my favorites comes from Heeter (2000) in which the linear SMCR is reordered to put the viewer in charge of designing content carried by channels. Perhaps I like it most because the sender is conspicuously absent. Although Webster and Wakshlag (1982) gave us the "audience availability" choice model for the first generation of television, it was Heeter (1985) who gave us the "channel repertoire" choice model for the second-generation of television -- so we may want to examine Heeter's latest model (see Figure 2) with some additional respect. The model in Figure 2 is mostly self-explanatory, except the term "affordances," which means *useful in an interactive way* [my interpretation of Heeter's meaning, not hers]. Heeter's accompanying conceptual grid (see Table 2) is comparable to my own, but probably gives too much credit to the television networks that pander to passive audiences.

Figure 1 (Ferguson, 2002)

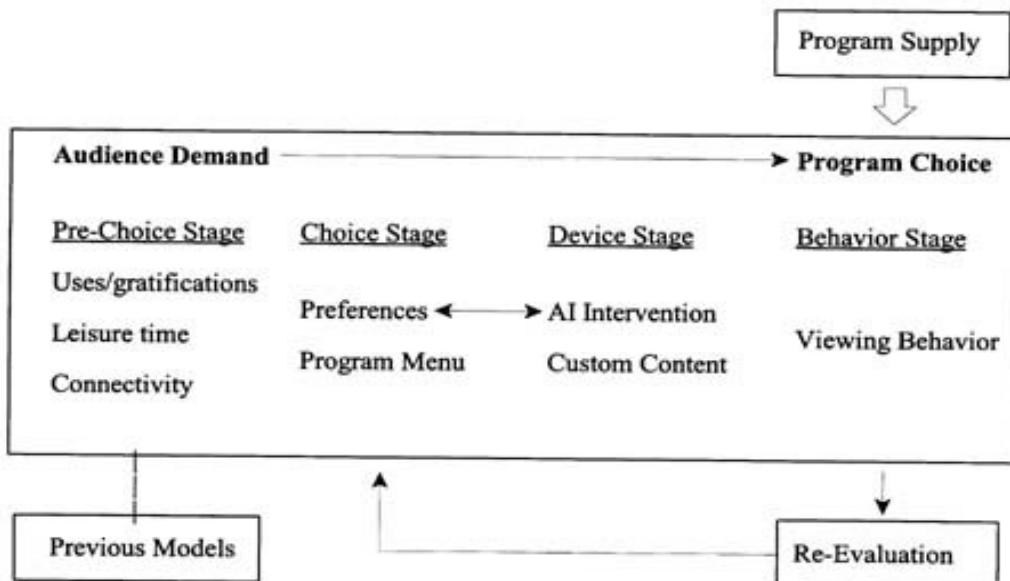


Table 1 (Ferguson, 2002)

TV1G	TV2G	TV3G
Program Factors		
content is king	distribution is king	convergence is king
mainstream	alternative	customized
time-based schedules	channel-based schedules	program-based menus
dayparting	channel matching	menu-driven
free content paid by advertising/donations	pay per channel	PPV
programmers	schedulers	content providers
independents for other choices	cable for cornucopic choice	homegrown choices
spinoffs within shows	cross-promotion between shows	cross-platform tie-ins
studio supplier	independent supplier	user-generated content
Structural Factors		
one-way	enhanced one-way	two-way
reach limited by terrestrial signals	reach limited by channel capacity	reach limited by bandwidth
3 networks and PBS	new broadcast networks and netlets	web-based/DBS
no niche	niche (MTV)	subniche (Golf Channel)
mass homogeneity	fractionalization	walled gardens
one screen	picture-in-picture	multiplexing
printed guides	scrolling guide	IPG/EPG
no logos, no score boxes, low clutter	channel bugs	computers; cluttered screens
Technology		
analog propagation; dials and knobs	analog storage; buttons	digital
NTSC 4:3	midband/channel positioning	ATSC 9:5
antennae (rabbit ears, bow ties, aerial)	wired coaxial	wired fiber and satellite
B&W; warm up; fine tuning; monaural	color; instant-on; elec. tuning; stereo	home theater; surround sound
standalone tuner	set-top tuner and routers	firewire
unscrambled	analog scrambling	digital encryption
video-on-supply	PPV/NVOD	VOD/PPV
central playback (live)	VCR	DVR
hard-wired	modular (e.g., set-top box)	reprogrammable integrated
Theoretical Models		
real-time	compressed multiplexing	asynchronous
lean-back passive	channel surfing	lean-forward active
flow strategies	seamless	no flow
dayparting	rentals; sell-throughs	SVOD
audience availability (Webster)	channel repertoire (Heeter)	interactive (Ferguson)
ritualistic	ritualistic	instrumental
source-centered control	medium-centered control	audience-centered control
network-centered production	channel-centered production	studio-centered production
channel loyalty	genre loyalty	program loyalty
home-centered	person-centered	cyber-centered
Economics and Regulation		
one stream (advertising)	two streams (subscriptions)	three streams (merchandise)
license to print money	branding for value	multiple windows
no primetime media competition	video games	web surfing
minor commercial avoidance	zipping, zapping, flipping to avoid	automatic commercial skipping
mass marketing	segmented marketing	targeted ads
FCC regulation (localism)	deregulation (common carrier)	unregulated internet

Table 2

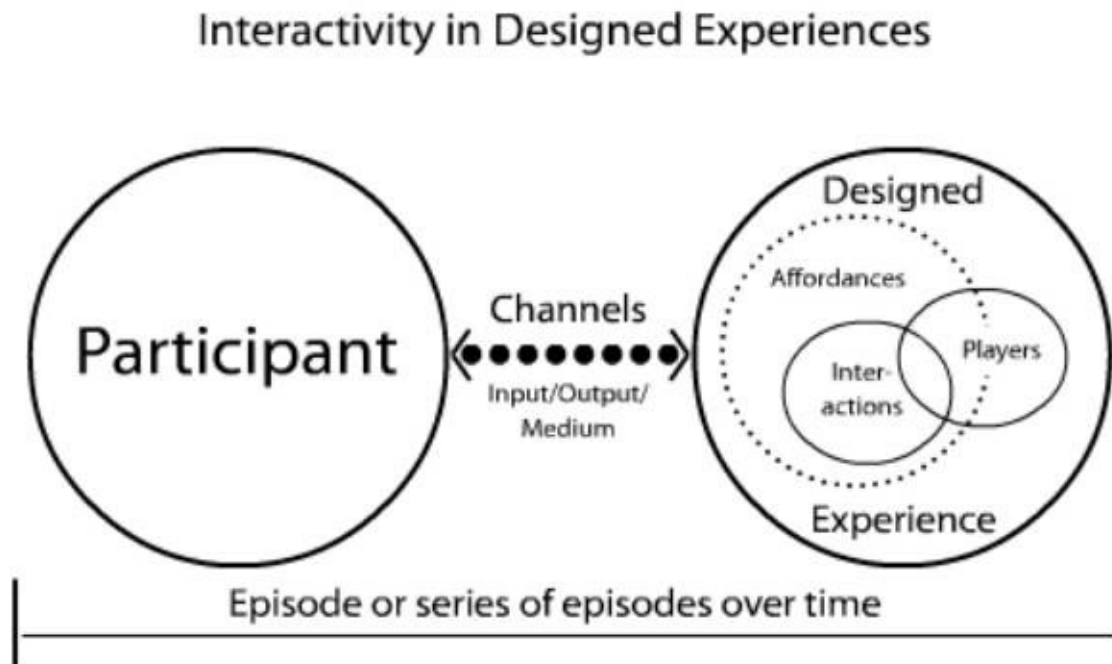
Experience in TV and Computers (Heeter, 2000)

	Television	Computers
Screen resolution (amount of information displayed)	Relatively poor	Varies from medium-sized screens to potentially very large screens
Input devices	Remote control and optional wireless keyboard that are best for small amounts of input and user actions	Mouse and keyboard sitting on desk in fixed positions leading to fast homing time for hands
Viewing distance	Many feet	A few inches
User posture	Relaxed, reclined	Upright, straight
Room	Living room, bedroom (ambiance and tradition implies relaxation)	Home office (paperwork, tax returns, etc., close by; ambiance implies work)
Integration opportunities with other things on same device	Various broadcast shows	Productivity applications, user's personal data, user's work data
Number of users	Social: Many people can see screen (often, several people will be in the room when the TV is on)	Solitary: Few people can see the screen (user is usually alone when computing)
User engagement	Passive: The viewer receives whatever the network executives decide to put on	Active: User issues commands and the computer obeys
	Reality	Virtual Environments
Screen resolution (amount of information displayed)	Full human eye capacity	3D goggles, large screen projection, or computer monitor
Input devices	Head and body movement, tactile, sound, sight, smell, taste, walking, running	Mouse and keyboard, head tracking, glove/gesture, wand
Viewing distance	Varies from inches away to miles	A few inches to six feet
User posture	Varies from prone to sitting to standing.	Sitting or standing.
Room	Anywhere	Research laboratory or gaming center.
Integration opportunities with other things on same device	Anything	Can connect with physical devices, sensors, virtual devices.
Number of users	Varies from solitary to large crowd	Solitary or small group or mass theater audience.
User engagement	Varies from active to passive	Active: not much happens unless the participant does something.

Heeter (2000) describes the nature of audience-centered communication in the PCE model:

“Communication has been modeled as flow of message from source to receiver over sensory channels, exemplified by Berlo's (1960) classic SMCR model (SOURCE MESSAGE CHANNEL RECEIVER). When considering interaction in the context of designed experiences, I propose an alternative participant-channels-experience model (PARTICIPANT - CHANNELS - (DESIGNED) EXPERIENCE).” (pp. 83-84).

Figure 2



New Method

Sometime new theories need new methods, so I am proposing that social networking is ripe for study with national samples of active users. My own unsatisfying experiments with convenience samples made me yearn for national samples, mainly to satisfy modern-day journal reviewers (who, in an earlier era, were strangely accepting of convenience samples upon which many of the great theories from the early 1980s are based, e.g., Levy, 1980; Rubin, 1984).

Multistage cluster sampling itself is the usual answer to drawing a sample where no sampling frame exists. With each selection stage, a multistage cluster sample accumulates additional sampling error. The fewer the number of stages, the smaller the error should be. Another alternative is random digit dialing, limited to telephone surveys.

Briefly, my new method takes the known proportion of first names and uses proportionate-to-population sampling to create a sampling frame (Ferguson, Greer, & Reardon, 2007). To give a simple example, suppose a researcher wanted to study adults 35-45 years old (as of 2006). Knowing the exact proportion of first names given babies in the years 1960 through 1969 (readily available online at <http://www.ssa.gov/OACT/babynames/decades/names1960s.html>) the names could be entered into an Excel spreadsheet, along with the exact percentage of babies born in the 1960s with any given first name. Using the LOOKUP function, any number of randomly-generated first names could be chosen in proportion to the entire list (nearly everyone born, omitting those whose names did not make the top-1000 list).

The first stage of name-based cluster sampling is the generation of a list of names large enough to satisfy the response rates of online surveys for which participants are solicited via e-mail. If a 30 percent response rate (with reminders) is deemed realistic, then a sample of 300

respondents might require the generation of 1500 names. The researcher, still working in the first stage, can enter the random names one at a time into the search window within the database, in this case MySpace.com, which has over 155 million unique members as of February 2007, primarily in the United States.

The second stage of name-based cluster sampling is generating a randomly-chosen index (e.g., using the Excel random number generator) to choose a particular match, perhaps taking advantage of advanced search features that limit the age or state of residence of names that match. In cases where advanced searching is unavailable, the researcher would have to skip over ineligible names that chosen by the random index.

In this example, assume that the name Lisa is drawn (ranked number-one among first names given baby girls in the 1960s). At this writing, there are 277,730 matches named Lisa and adjusting the URL search formula to "Country=US" there are 234,686 Lisas in the U.S). The randomly-generated index is 24506, using Excel's random number generator. The sixth name on page 2450 should be the 24506th name (MySpace.com begins with page zero). The lengthy URL in the browser window ends with a Page= formula into which the number 2450 can be entered. The first age-qualified match after the 24506th name is a 45-year old woman in Marrero, LA. Her selection is arguably random. Her popular name had a better chance of being chosen, but she competes with many more people sharing her name. Every Lisa had a chance to be chosen (provided each belonged to MySpace.com, of course).

An invitation can then be pasted into the message box for a message to Lisa, asking that she participate in a research survey. The use of inducements or persuasive explanations is then employed to garner cooperation. A site such as SurveyMonkey.com can be used to process the survey that Lisa completes. Also Lisa can be asked again in two weeks to please fill out the

survey if she has not already done so, using the Friend ID number that appears in the URL of the sent message.

At this point, the first of 1500 solicitations is done. If it takes 60 seconds, with practice, to complete each solicitation, it will take at least 750 minutes or 12.5 hours to send out all the invitations. The time consumption can be spread out by recruiting student researchers to spend an hour or two for optional extra credit to solicit 40 names apiece. Clearly, building the sample is not as easy as drawing a systematic random sample, but the total effort to construct a national sample is no more time consuming than conventional multistage cluster sampling.

The most common names will be drawn again and again, making Lisa the most likely name in the sample. If the random selection works in proportion to the population as planned, there should be no more Lisas chosen than the population would predict. The sample should reflect the population, except for sampling error measured by the chosen statistical analysis (e.g., SPSS).

A number of advantages for name-based cluster sampling are evident. First, there is no need to obtain permission from the owner of the list. For example, drawing a random sample of college students using www.facebook.com would ordinarily require a master list that the designers of the web site would be reluctant to share, even though access to all names is available free to members of the list, whom themselves pay nothing to join. Such social networks represent a huge resource for national research, especially when the population is so well-represented among certain target populations. For example, over 85 percent of all college students have posted a profile on Facebook.com (Arrington, 2005). The number of Facebook.com subscribers has reached 10 million by November 2006 ("About Facebook.com," 2006), with 60 percent of members logging in daily (Arrington, 2005). MySpace.com reaches a

far wider membership, with nearly 130 million subscribers (over 100 million in the U.S), but only about 33 percent of the U.S. population. Even so, surveys that investigate new media adoption and behavior may be very well-suited to members of online chat rooms.

Second, potential survey participants can be solicited without much cost other than the time of the researcher. Invitations to complete an online survey can be pasted to individual sampling units (members on the list) and, depending on the type of survey, reminders are readily handled.

Finally, name-based cluster sampling can work on any size population of searchable names, whether membership is universal (e.g., faculty names on a searchable university site) or nearly universal (e.g., Facebook.com in the case of socially networked college-age students). The method is especially useful for studying phenomena related to online social networking itself.

Name-based cluster sampling has a number of limitations, one of which is the response rate. Only 320 usable responses were received from the more than 1500 people who received an invitation to take the survey in a pilot study (Ferguson, Greer, & Reardon, 2007), even with follow-up correspondence. The Web was the most expeditious means of administering the questionnaire to obtain a national sample. However, invitation recipients might not have been interested in ceasing their activities on Facebook.com to take the survey. Sheehan (2002) examines the arguments for and against the importance of response rates in great detail, noting that different scholars hold opposite viewpoints regarding how serious is the threat to validity posed by low response rate..

Another possible limitation to the future use of name-based cluster sampling is that sites like Facebook.com and MySpace.com prohibit mass mailings. In the fall of 2006, Facebook.com

began to limit the activities of members who solicit information using form letters, although there is no evidence that slightly different messages would be detected by internal e-mail servers.

More important, name-based cluster sampling is another tool in the arsenal of media researchers, whether or not it is widely adopted. The field of mass communication is often criticized for the use of convenience samples (e.g., Riffe & Freitag, 1997; Sheehan, 2002) or student samples (e.g., Abelman, 1996). Getting to a national sample more easily, when local samples are sometimes suspect, is a tool to be considered. No claim is being made that this particular flavor of multistage cluster sampling is some kind of panacea, but name-based cluster sampling is a real attempt to generate a true random sample from a *national* population. Future research should examine the relative effectiveness of name-based cluster sampling. At the very least, it may prove a strong method for underfunded graduate students conducting research for their master's theses or doctoral dissertations, even for local populations.

Discussion

Why should anyone care about newer models and a much more active audience? The primary concern for the media industry is who will pay the bill. Boring as the choices were, the old first-generation television world was incredibly efficient at aggregating eyeballs for advertisers and providing memorable programs for free. Audiences were happy, networks were happy, and advertisers were happy. For all its lack of choice, the cost to the consumer was nearly perfect. The second generation of television put some dysfunction into the three-network world, but it did show that viewers would be willing to pay upwards of \$70 per month for more choice. The third generation may not bring about another incremental change, but a "discontinuous change" (Ferguson, 2006, p. 314).

To those who conduct research, the primary concern, of course, is what theoretical

models are the most useful or heuristic in guiding audience research. What is the future of a sender-based research agenda? An active audience will not prevent effects research, but unlimited choice will put the onus on the end user. Congress seems to enjoy dragging the network chiefs to testify about their potential dereliction of public trust with the public airwaves. If viewers rot their brains on UCG from the neighbor down the street rather than some equally-inappropriate *Jackass*-style program from MTV, then who will the policy-makers blame? Will a sufficient number of citizens even use the public airwaves anymore, as nearly 90 percent of viewers get their content over a wire? My conceptual grid traced the movement from regulation to deregulation to "unregulation," but will the unregulated internet be regulated at last? Perhaps, if the FCC is to survive, if the First Amendment can be accommodated.

Notes

¹ The idea of an active audience has also been studied in a different sense, though using the same phrase. British cultural studies (e.g., Morley) argue that ethnography and reception analysis are the royal road to understanding the active audience. Textual interpretation is used to account for preferred and oppositional readings of the same content, suggesting the audience is active because of the diversity of viewpoints. This sense of the active audience is not the topic of this paper, however.

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