Beneath the Veneer of Fragmentation: Television Audience Polarization in a Multichannel World

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This study reviews the history of television audience fragmentation in the United States and uses a secondary analysis of Nielsen peoplemeter data to assess the current state of both fragmentation and audience polarization across 62 of the most prominent television networks. Audience fragmentation is more advanced than is generally recognized. Polarization, the tendency of channel audiences to be composed of devotees and nonviewers, is also evident, though modest. Contrary to the "law of double jeopardy," there are now many examples of both small-but-loyal and small-but-disloyal audiences. Loyalty and audience fragmentation affect network profitability and have social consequences.

As recently as 1977, three broadcast networks accounted for over 90% of all the prime-time television watched by Americans (Veronis, 1994). Everyone consumed a similar, broadly appealing, diet of news and entertainment. Since then, an avalanche of programming, much of it targeted to specific segments of the population, has fragmented the audience almost beyond recognition. These changes affect network profitability, but they can have social consequences as well. Theorists have raised two related concerns. One is the fear that nations will be denied a powerful medium of social integration in which all citizens can attend to the nation's business (Katz, 1996). Another even more worrisome prospect is that technology and advertiser-driven programming will reconfigure the mass audience into many small, relatively exclusive communities of interest that never encounter dissident voices or different points of view (e.g., Sunstein, 2001; Turow, 1997). These concerns map onto two features of audience behavior: *fragmenta-*

tion and *polarization*. Although the first is familiar to students of television, the second is largely undocumented. This study reviews both the history and current state of fragmentation, and presents a comprehensive assessment of audience polarization across 62 of the most prominent television networks in the U.S. I find that audience fragmentation is more advanced than is generally recognized. Contrary to much research and theory on audience behavior, many "small but loyal" audiences have begun to emerge, though none is so faithful to its favorite network as to confirm the worst fears of social polarization.

Audience Fragmentation

Between cable television, direct broadcast satellites, and other "alternative delivery systems," over 80% of U.S. homes now have access to more than just their local broadcasters. The result, according to Nielsen Media Research, is that the average television household (which includes virtually all American homes) can receive over 100 channels of programming (Nielsen, 2003). This is a dramatic and relatively recent change in the television-viewing environment. By way of comparison, in 1990 the average household could receive only 33 channels. When one considers the burgeoning numbers of VCRs, DVDs, PVRs, and newer broadband delivery systems, the typical American TV viewer functions in an ever more abundant, at least numerically, multichannel environment.

Media companies have been quick to exploit the expanding delivery system. At last count, there were 339 "national cable networks" (NCTA, 2004). Many offer some combination of new programming and reruns. Most are designed to attract a certain kind of viewer, but they all compete for the attention of the audience. Webster (1986) described this new media environment by highlighting three ways in which it differed from the old. First, in the new environment, programming is, in the aggregate, more diverse. Although diversity is subject to many definitions (Napoli, 1999), one would be hard pressed to argue that TV programming today is more homogeneous than, say, in the 1950s. Second, in the new environment, content is correlated with channel. Rather than offering a little something for everyone, channels tend to specialize in a particular type of content. Although some newer entrants have opted for the familiar "broadcast" model, most networks "narrowcast" whatever type of content they believe will attract a desired demographic. Third, channels in the new environment are differentially available. Almost since their inception, the "big three" networks—that is, NBC, CBS, and ABC—were available to all television households. Every home had a uniform, if limited, universe of programming from which to choose. Today, different delivery systems offer different bundles, or tiers of service, at different prices. The reach of each network is, thereby, circumscribed while the menu of choices can vary significantly from one household to the next.

Webster (1986) went on to suggest that these changes would produce two features in macrolevel audience behavior: fragmentation and polarization. Fragmentation describes a process by which the mass audience, which was once concentrated on three or four viewing options, becomes more widely distributed. As a result, the average channel audience becomes smaller. This is a reasonably well-documented feature of the U.S. television industry. Although the older, main-
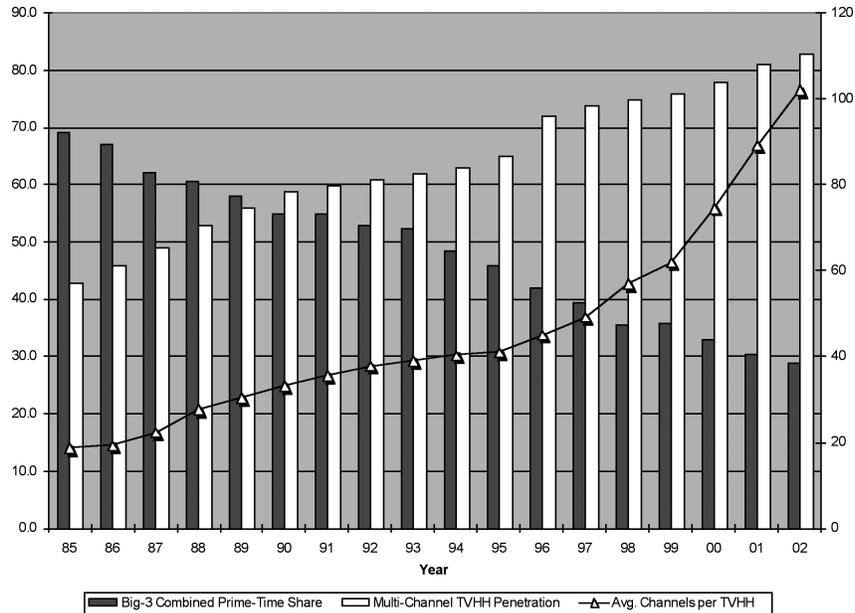
Figure 1. Trends in audience fragmentation: Network shares, multichannel penetration, and average channel per TVHH from 1985 to 2002.

stream broadcast networks (i.e., ABC, CBS, and NBC) still have much larger audiences than their newer rivals, the combined weight of the competition has taken its toll. Whereas a broadcast network might once have expected to command 30% or 40% of those watching television, it is now fortunate to have audience shares in the double digits. Figure 1 offers a graphic depiction of this downward trend in viewing, beginning with the 1985–1986 television season. The dark bars are the combined prime-time shares for ABC, CBS, and NBC among all television households (TVHH). In 1985, the big-three accounted for 69.3% of all such television viewing. As of the 2002–2003 season, their total had dropped to 29%. The light bars indicate the percent of TVHH that subscribe to a multichannel provider (e.g., cable, satellites). The line punctuated by triangles is the average number of channels a household could receive for each year in question. Although multichannel services have gradually penetrated more and more homes, the average number of channels receivable has increased at a more rapid rate as delivery systems have ratcheted up their channel capacities.

Channels are multiplying around the world, with much the same result as in the United States. Established networks, often state-controlled monopolies, have seen their audiences eroded and their prominent place in the life of the nation diminished. No longer is there a central forum where all citizens, metaphorically, gather. This might diminish the power of television to create a shared symbolic environ-

ment (Beniger, 1983). Commenting on the public broadcasters of Europe and Israel, Katz (1996) argued that the increasing segmentation of audiences denies nation-states a means with which to promote social integration and a sense of common purpose.

Although the audience for older networks is unquestionably shrinking, fragmentation is not without potential social benefits. Promoting diversity is a cornerstone of communications policy in most liberal democracies (McQuail, 1992; Napoli, 2001). Fragmentation could mean that instead of everyone watching programs devoted to the "lowest common denominator," the mass audience is now distributed across a more diverse universe of content. This would be a testament to what Napoli refers to as "horizontal" diversity of exposure. Whether it is ultimately good for society, though, depends on what happens under the veneer of fragmentation. Are viewers using the choices they have to sample a little of each network —achieving what Napoli (1999) called "vertical" diversity of exposure—or simply bingeing on their favorites?

What is not clear from the gross measures of audience size reported in Figure 1, then, is the intensity with which people use any given channel. If a network has 10% of the audience, is that because each person spends about 10% of his or her time watching, or does it mean that some people watch for extended periods of time while others ignore it altogether? Is the audience for each network normally distributed or polarized into groups of very heavy and very light users? Either pattern of behavior could account for the audience fragmentation we see.

Audience Polarization
Assessing the tendency of audiences to polarize around classes of content can help us understand the social implications of the new media environment. For instance, common notions of selective exposure (e.g., Zillmann & Bryant, 1985) raise the troubling prospect that people will use the abundance of choice to avoid material they find distasteful and seek out material that conforms to their predispositions. A steady diet of such programming might, in turn, cultivate perceptions of reality at variance with larger social norms (e.g., Gerbner, Gross, Morgan, Signorielli, & Shanahan, 2002). Sunstein (2001) explicitly warned that filtering out dissident voices in favor of "like-minded" speech can lead to "group polarization." Certainly, media companies that are interested in creating loyal, demographically homogeneous audiences are only too happy to cater to those preferences. If each channel's audience represents a small group of viewers who watch their favorite network and little else (i.e., a polarized audience), it would comport with fears that the mass audience is being reorganized into segments prone to social polarization (e.g., Gitlin, 1998; Sunstein, 2001; Turow, 1997).

Like fragmentation, audience polarization is a macrolevel construct that describes the behavior of a large group of people (i.e., an audience) rather than any one person (Webster & Phalen, 1997). In the old media environment in which a few widely available networks offered a broad menu of programming, the potential for audience polarization was limited. In the case of newer television networks, however, there are two reasons to expect polarization: (a) the correlation of content with channels, and (b) the differential availability of those channels.

Economic models of program choice (e.g., Owen & Wildman, 1992), gratificationist theory (e.g., Rosengren, Wenner, & Palmgreen, 1985), and several decades of industry practice (e.g., Webster, Phalen, & Lichty, 2000) all suggest that different kinds of people prefer different types of programming and that they act on those preferences to gratify a variety of appetites. Modern television networks are designed with that in mind. NCTA's list of cable networks includes channels specializing in news, sports, music, movies, history, arts, science, science fiction, religion, comedy, cartoons, cooking, weather—you name it. Other networks offer a more varied menu of program types, yet explicitly cater to men, women, children, Blacks, or Latinos. This is partly an effort to establish a distinctive brand (e.g., if you want news, turn to CNN). It is, even more importantly, an attempt to produce a particular audience demographic that can be sold to advertisers. Even the new broadcast networks such as UPN, WB, and PAX intentionally skew either young or old. They are expected to appeal to some but not to others. As Turow noted, cable networks "aiming to lure desirable types to specialized formats have felt the need to create 'signature' materials that both drew the 'right' people and signaled the 'wrong' people that they ought to go away" (1997, p. 5). They are, in other words, designed to polarize the audience.

This consequence of modern programming practice is compounded by the differential availability of channels. With over 300 national networks and many more regional or local services trying to enter the 100-channel household, there are going to be losers. At present, no cable network reaches as many viewers as the original broadcast networks. Many cable networks are simply unavailable in the majority of television households. As a practical matter, the structure of the media environment forces some of a channel's potential audience to the pole of nonuse, even if their preferences would dictate otherwise. Webster (1986) called this *de facto polarization*. Furthermore, when channel capacities are unconstrained, viewers themselves winnow the choices in their environment by subscribing to some services and not others, and/or establishing relatively stable "channel repertoires" that effectively exclude most channels from consideration (e.g., Ferguson & Perse, 1993; Heeter, 1988; Neuendorf, Atkin, & Jeffres, 2001). For example, Nielsen reports that the average U.S. household uses fewer than 15 channels, and that in homes receiving 200 channels, only 19 are actually watched (Nielsen, 2003). Of course the composition of the repertoire varies from household to household, thereby creating differential patterns of channel use.

Unfortunately, neither media theory nor the available evidence establishes the breadth or depth of audience polarization in the new media environment. Using 1982 Arbitron television diary data collected in a southwestern market, Webster (1986) demonstrated that the lone Spanish-language station had an unusually loyal audience. Specifically, whereas the station captured a 6.3 market share across all viewers, the few who actually tuned in spent 37.6% of their time with the station. This was consistent with an earlier study by Barwise and Ehrenberg (1984), also using local market data, that found minority-language and religious stations enjoyed abnormally high *time-spent-viewing* (TSV) levels despite their otherwise limited reach. Barwise and Ehrenberg, however, argued that these were exceptional cases, and that their main finding was one of "double jeopardy."

First described by McPhee (1963), what is sometimes called the law of double jeopardy (Goodhardt, Ehrenberg, & Collins, 1987) stipulates that unpopular cultural products have the dual problem of both small and disloyal audiences. This is directly at odds with the intuitively appealing notion that small audiences tend to be composed of die-hard fans, the so-called small-but-loyal audience. Indeed, several more general studies of audience behavior that have operationalized audience loyalty as either TSV (Barnes, 1990; Barwise & Ehrenberg, 1984) or repeat-viewing (Ehrenberg & Wakshlag, 1987; Webster & Wang, 1992) have indicated that double jeopardy is the rule, not the exception. If this phenomenon holds up in the multichannel environment, it suggests a limited potential for audience polarization. In fact, in a more recent and far-reaching evaluation of audience behavior and television economics, Barwise and Ehrenberg (1988) concluded, "Thirty years from now, we believe, television will still be a mass medium with largely unsegmented audiences watching varied programs for many hours and mostly at a low level of involvement" (p. 121).

The extent of audience polarization is, then, very much an open question. The answer has pragmatic implications for how media companies make, predict, and sell audiences (Napoli, 2003), but it also has implications for the role this most popular of all media might play in binding the nation together. If the multichannel environment succeeds in fragmenting the audience into small groups that use some sources intensively while they ignore most of the others, then we may indeed be experiencing what Turow (1997) described as "a major shift in balance between society-making media and segment-making media" (p. 3). It is time to see what lies beneath the veneer of fragmentation. Specifically, I will address five research questions:

RQ1: How is the total audience distributed across the available networks?

RQ2: What percentage of viewers use (or fail to use) each network in the course of a week?

RQ3: How much time do people spend with the networks they elect to view?

RQ4: What is the relationship between network audience size and average TSV?

RQ5: Among those who use a network, what percentage of their overall TV viewing time is devoted to that versus other networks?

Method

The study is based on an analysis of data collected by Nielsen Media Research using its national peoplemeter sample, sometimes called the Nielsen Television Index (NTI). These are the data on which virtually all national TV media buys, and many programming decisions, are based. Peoplemeters are electronic devices that monitor the behavior of all TV sets in sample households and are designed so that individual members of the household can signal their presence to the meter. Nielsen

places meters in homes using a multistage cluster sampling procedure. During the time of data collection, Nielsen had a national sample of just over 5,000 households that included almost 13,000 individuals. Over any measurement period, the actual number of homes providing useful information is somewhat less than the total installed base. For a more complete description of Nielsen's methods, see Webster et al. (2000).

The data for this study were collected during the first week of February 2003. Rather than singling out any one "daypart" (e.g., prime time), I included all viewing. I chose this time frame because (a) it was a "sweeps" month during which the major national networks were broadcasting new programs, rather than reruns; (b) it was when TV viewing is at seasonal highs, yet unaffected by major holidays; and (c) it was of sufficient scope and duration to provide fairly stable metrics of channel use. It was also far enough in advance of the U.S. invasion of Iraq— which happened in late March—that the results are not likely to have been skewed by world events. With limited exception, the analysis is based on the behavior of all adults age 18 and over, again to provide a broad, stable overview of channel use. There were 8,575 such people in the sample, representing a population of 207,210,000 persons nationwide. Unfortunately, data for Spanish-language networks, which come from a separate Hispanic sample (NHTI), were unavailable.

The centerpiece of the analysis is a rather large table that describes each of 62 national networks on five dimensions. These networks are the most widely viewed in the U.S. and serve as the study's units of analysis. The first column of information is the universe of households in which each network can be received, expressed as a percentage of total TV households (TVHH). This is a structural variable that may be of importance in explaining de facto polarization. The second column presents each network's overall share of audience: That is, of all the viewing done by adults during the week, what percentage of the total number of "man hours" is attributable to a particular network? This is a conventional measure of audience size and is the most common metric for representing audience fragmentation. It is the kind of audience behavior that's reported in Figure 1.

The third column of data is the network's cumulative audience (sometimes called the cume rating or *cume*). It is expressed as the percentage of all persons 18+ who have viewed for at least 1 minute during the week. Though it is a conventional measure of audience size, it offers a glimpse at polarization. The obverse of the cume is the percentage of viewers who never, for reasons of structure or preference, watch that network. It captures the number of people who sit at the pole of nonuse. The last two columns offer a more direct assessment of polarization. These data are less familiar than "ratings" and "shares" and so deserve a few words of explanation.

Nielsen Media Research sells a service to clients called *NPower*. It allows those clients to access the Nielsen database so they can produce customized analyses. One reason that polarization is not well documented in the academic literature is because it is a form of cumulative audience behavior (see Webster et al., 2000) that is not routinely described by Nielsen in published reports. NPower, however, is capable of tracking individuals over time and producing a number of such measures. I produced two, each with certain virtues and limitations.

The first is time-spent-viewing. This is a simple metric, directly analogous to the measures of time-spent-listening common in radio research. It is the average number of minutes per week spent viewing the network in question, among those who tuned in for at least a minute (i.e., those in the cume). So, in the case of a broadcast network with a large cume, TSV is based on a large number of people. In the case of a cable network with a smaller cume, it is based on a smaller sample size. It is the average amount of time that people who used the network actually spent watching that network, whether in only one or in multiple viewing sessions. In addition to being straightforward, it is a common measure of loyalty in studies assessing the double jeopardy effect (e.g., Barnes, 1990; Barwise & Ehrenberg, 1984).

The second measure is *share-within-cume*. This is an unconventional measure. Simple TSV can be hard to interpret without reference to the total amount of time a channel's users spend watching television. This measure adjusts for that by representing TSV as the percentage of total TV viewing time. In other words, among those who watched the network (the cume), what share of their time did they spend watching? As with TSV, it is based on samples that vary with the size of the cume. It is the measure Webster (1986) used to assess intensity of channel use. A high share-within-cume, relative to the network's overall share, would signal audience polarization.

Results

Table 1 presents the results of the NPower analysis. Sixty-two networks are listed down the left-hand side. To make the table easier to evaluate, I organized these as either broadcast or cable networks and, within each network grouping, sorted them by the average time spent viewing. To the right are the five columns of data described above. I discuss each, moving from left to right. To aid in understanding the relationships among these variables, Table 2 offers a correlation matrix of all five variables across 62 cases.

TVHH Universe describes the percentage of all television households, an estimated 106.7 million at the time of this survey, capable of receiving the network signal in question. This is a powerful structural constraint that shapes network usage. As expected, the older broadcast networks have near universal penetration of the market, with coverage ranging from 99 to 95% of all TVHH. The most successful, advertiser-supported cable networks generally cover 80 to 70% of the market, while newer or more regional services have considerably less coverage. Premium cable services (i.e., HBO, Showtime, Cinemax, and The Movie Channel) that charge an additional fee to subscribers have smaller coverage still. Because there are 339 national cable networks, there are over 270 services not included in Table 1. These would undoubtedly be at the lower end of the coverage spectrum.

Share of total audience viewing expresses how large a "piece of the pie" each network gets. If all sources of programming were listed, the numbers would add up to 100%. In the case of Table 1, the column total is 65. In other words, 35% of all the television viewing done during this week in February is attributable to

Table 1. Television Audience Fragmentation and Polarization

Network	TVHH universe (%)	Share of total audience viewing	Weekly cume (%)	Weekly TSV	Share within cume
BROADCAST					
CBS	95	6.3	65	189	7.9
NBC	95	5.9	67	173	7.4
ABC	97	5.1	66	152	6.4
PBS	99	2.0	45	89	3.7
FOX	93	1.9	47	78	3.3
WB	90	0.8	25	59	2.4
PAX	85	0.4	15	55	2.0
UPN	86	0.4	18	46	1.7
CABLE					
HBO	33	2.0	20	196	8.0
FOX News Channel	77	2.7	27	193	7.5
Lifetime Movie	34	0.6	7	167	5.5
Cinemax	20	0.7	9	159	6.3
SHOWTIME	21	0.6	9	146	5.5
Turner Network Television (TNT)	81	2.3	34	134	5.0
Lifetime	81	1.9	28	130	4.8
Game Show Network	47	0.4	6	128	4.4
TV Land	73	1.1	16	127	4.2
CNN	81	2.1	35	118	4.7
Nickelodeon	81	1.5	25	117	4.6
TBS Superstation	82	2.3	39	116	4.5
SOAP Network	27	0.1	2	115	4.0
Hallmark Channel	47	0.5	9	110	3.7
Court TV	71	0.8	16	103	3.6
Home & Garden TV	75	1.0	20	97	3.8
USA Network	81	1.6	34	95	3.6
Cartoon Network	77	0.7	15	95	3.7
SCI-FI Channel	75	0.8	17	87	3.0
The Movie	19	0.2	5	86	3.0
ESPN	81	1.1	25	85	3.4
History Channel	77	1.0	23	85	3.4
A&E	81	1.1	26	85	3.1
MSNBC	73	0.9	23	76	2.9
Food Network	73	0.7	17	75	2.9
Black Entertainment TV (BET)	70	0.5	14	75	2.7
Toon Disney	35	0.1	3	72	2.6
The Learning Channel	79	1.1	30	71	2.8
American Movie Classics	79	0.9	25	71	2.5
Disney Channel	76	0.6	18	70	2.7
FX	75	0.9	26	66	2.6
WGN Superstation	53	0.6	17	64	2.3
Animal Planet	76	0.7	21	63	2.3
Discovery	81	0.9	29	59	2.3
MTV	80	0.7	26	55	2.3
Comedy Central	77	0.6	22	53	2.2
CNN Headline News	78	0.7	25	51	2.0
Spike TV (TNN)	81	0.7	26	51	1.9

Table 1, Continued

Network	TVHH universe (%)	Share of total audience viewing	Weekly cume (%)	Weekly TSV	Share within cume
CNBC	79	0.4	14	51	2.0
Weather Channel	80	0.6	24	50	1.9
Speed Channel	52	0.1	6	48	1.8
Discovery Health	39	0.1	5	45	1.7
Country Music Television (CMT)	62	0.3	12	43	1.6
ESPN2	79	0.4	21	41	1.6
ABC Family	80	0.5	23	40	1.6
Woman's Entertainment (WE)	47	0.2	8	38	1.3
Bravo	65	0.3	14	36	1.3
Entertainment TV (E!)	75	0.5	25	36	1.5
Travel Channel	66	0.3	16	36	1.3
VH1	78	0.4	23	34	1.4
TV Guide Channel	53	0.3	19	32	1.2
National Geographic	39	0.1	5	31	1.1
Outdoor Life	47	0.1	5	28	1.0
FUSE	28	0.0	2	16	0.6
TOTAL		65.0			

sources not shown on the table. This would include individual stations broadcasting syndicated or locally produced programming (e.g., the local news), as well as those 270 missing national networks. I should also note that this method of calculating share of total audience assumes that each network is feeding programming 24 hours a day. For all broadcast networks and some cable-only services, that is not the case. Hence their shares of total viewing may seem rather low. By way of contrast, if shares are calculated only during those times when each broadcast network was actually on the air, their numbers are significantly higher (e.g., ABC is 9.1; CBS, 10.8; FOX, 8.4; NBC, 11.3; UPN, 2.4; and WB, 3.1). These are closer to the audience shares typically reported in the popular and trade press.

That said, these shares of total audience viewing numbers capture rather well the phenomenon of audience fragmentation and provide a detailed answer to RQ1. The big-three networks have roughly twice the audience of their nearest competitors. In absolute terms, though, they now occupy just a sliver of the time people spend watching TV. Beyond them, viewing is, in the aggregate, widely distributed. The overall pattern of results fits what is sometimes called "Pareto's Law" (Neuman, 1991; Webster & Lin, 2002), wherein a small number of offerings account for a disproportionate share of the market. For instance, if we assume there are 300 national networks, then the top 5% of networks account for 40% of the viewing. Even so, this is a rather egalitarian distribution compared to other more abundant media such as books and magazines (Hindman & Cukier, 2003;

Table 2. Correlation Matrix of Network Audience Measures

	1	2	3	4	5
1. TVHH universe	—	480*	.753*	-.024	.040
2. Share of total viewing		—	.883*	.673*	.746*
3. Weekly cume			—	.384*	.475*
4. Average TSV				—	.988*
5. Share within cume					—

*$p < .01$.

Yim, 2002). Across the Internet, by way of comparison, the top 5% of websites account for 75% of the user traffic (Adamic & Huberman, 1999). There is, then, considerable "horizontal" diversity of exposure to television.

Weekly cume reveals the percentage of the adult population that watched (or, conversely, failed to watch) each network. These data answer RQ2 and offer our first indication of polarization. Once again, the big-three networks (i.e., ABC, CBS, and NBC) top the list. Each one is viewed by approximately two thirds of the audience during the week. Of course, that means that one third of the adult population doesn't watch ABC or CBS or NBC during a time of particularly heavy television viewing. Beyond the major broadcast networks, audience cumes drop off rather quickly. In fact, each of the remaining 59 networks was unviewed by a majority of the audience. The correlation between TVHH universe and cume ($r = .753$) suggests this is largely a matter of de facto polarization. Whatever the cause, for newer networks, a large part of the audience sits at the pole of nonuse. Even among networks that have a large potential universe, cumes can be low. For example, UPN can be received in 86% of all TVHHs, yet it has a weekly reach of just 18% of adults.

The remaining columns offer additional measures of audience polarization. Here, a more complicated picture of audience behavior begins to emerge. Average time-spent-viewing (TSV) answers RQ3 and gives us a sense of the intensity of channel use among those who do view a network. Each of the big-three networks continues to do well, being viewed for 2 1/2 to 3 hours a week, but the networks racking up the largest TSV are HBO and FOX News Channel: Each was watched for over 3 hours a week. Premium cable channels and networks specializing in movies are watched for relatively long periods of time. Beyond that, an odd collection of networks with otherwise small audience shares are high on the list.

Table 2 addresses RQ4. The law of double jeopardy would suggest that the networks with the highest TSV also tend to have higher cumes, but this is only partially true. Table 2 indicates that the overall correlation between those variables is .384. As a rule, then, double jeopardy obtains. However, there are many examples of small-but-loyal audiences that offer exceptions to the rule: FOX News Channel, TV Land, Nickelodeon, SOAP, Hallmark Channel, Court TV, Lifetime,

Table 3. Comparing the Distribution of Viewing Time Across Four Groups of Viewers

	Share of viewing devoted to selected sources			
	BET viewers	FOX viewers	HBO viewers	MTV viewers
BROADCAST[a]				
CBS affiliates	7.71	8.79	7.65	7.64
NBC affiliates	6.80	9.42	9.32	8.05
ABC affiliates	6.91	8.11	8.11	7.37
PBS affiliates	1.04	1.41	.94	1.21
FOX affiliates	6.10	4.77	4.93	5.86
WB affiliates	2.98	2.07	2.58	3.16
PAX affiliates	.45	.46	.31	.34
UPN affiliates	2.17	1.18	1.53	1.75
CABLE				
HBO	2.36	1.80	8.05[b]	2.67
FOX News Channel	2.10	7.47[b]	2.16	2.31
Turner Network Television (TNT)	3.37	2.61	2.35	3.22
TBS Superstation	2.86	2.52	1.94	3.05
Lifetime	2.71	1.98	1.69	2.29
CNN	1.47	2.88	1.97	1.87
USA Network	2.36	1.81	1.44	2.20
Nickelodeon	2.19	1.49	1.45	1.96
MTV	1.71	.85	1.03	2.32[b]
ESPN	1.72	1.08	1.26	1.56
A&E	1.39	1.45	1.05	1.33
History Channel	.98	1.62	1.27	1.28
BET	2.69[b]	.44	.70	1.10
MSNBC	1.06	1.63	.93	1.07
Cinemax	.77	.55	2.45	.71
Toon Disney	1.52	.70	.92	1.25
Spike TV (TNN)	1.04	.80	.65	1.18
Comedy Central	.80	.70	.79	1.18
Disney Channel	1.14	.58	.79	.93
SCI-FI Channel	.84	.70	.80	.87
VH1	.91	.48	.49	.96
CNBC	.19	.65	.36	.37
All other sources	29.66	29.00	30.09	28.94
Total of all-time viewing	100.00	100.00	100.00	100.00

Note: Numbers are the percentages of time each group devoted to each programming source.

[a] Unlike in Table 1, broadcast sources include all viewing attributable to affiliates, not just programming fed by the network.

[b] This number is the share-within-cume for the network in question.

Lifetime Movie, and the Game Show Network, to name a few. No one genre appears to dominate. Furthermore, if we eliminate the big-three networks from the picture, the overall correlation between cume and TSV is .112, a statistically insignificant relationship. Interestingly, TSV was unrelated to the channel's universe. So, the most available channels were not necessarily the ones that drew the most intense use.

Share-within-cume expresses TSV as a percentage and answers RQ5. So, for example, although FOX News is viewed by just 27% of the adult population (i.e., the cume), those people spend 7.5% of their time watching the network. The balance of their viewing was widely distributed across the remaining networks, roughly in proportion to total audience shares. The same general pattern exists for all networks. Those who watched a given network spent a small portion of their time there and distributed the remainder of their viewing across channels, with the big-three networks typically receiving the largest shares.

Table 3 illustrates how four groups of viewers distributed their time across selected programming sources. These were among the most disparate distributions I found. The correlation between the share distribution of BET viewers and FOX News viewers was .885 ($N = 62$, $p < .001$). By way of comparison, 1,891 correlations were computed for all possible network pairings. The correlations ranged from .992 to .740, but the vast majority (86%) exceeded .90. Almost all of the correlations below that level were associated with pay cable networks (e.g., HBO, Showtime, etc.). The people who pay for such services watch them almost as much as a major broadcast network (e.g., ABC, CBS, etc.), causing their share distributions to deviate somewhat from the norm. What is remarkable is how similar the viewers of any given channel are when it comes to how they distribute their TV viewing time across the universe of available content.

Conclusion

The phenomenon of audience fragmentation is well underway—more so than is generally appreciated. ABC, CBS, and NBC, the bastions of American broadcasting, accounted for a total of 17.3% of all the time people spent watching television. This is considerably lower than the prime-time audience shares we often hear reported, and it reflects the fact that broadcast networks are "dark" through much of the day. Of course, the parent corporations of these networks have other ways to reach the public but, in an absolute sense, the big-three are nowhere near the dominant presence they once were.

Still, the older networks occupy a unique position in the media landscape. They are available in virtually all U.S. homes. Their audience shares and weekly cumes far exceed those of the nearest competitors. They offer something for almost everyone and a majority of people are clearly in the habit of watching them. In the parlance of advertising, no other networks can deliver the reach of these broadcasters. Though they are not the expansive public forums envisioned by Katz (1996), they do provide a modicum of common ground for American viewers.

In addition to their large cumulative audiences, the big-three networks enjoy high levels of TSV. This is the classic double-jeopardy phenomenon. However, contrary to earlier research, this study suggests that the old networks are now the exception rather than the rule. Once they are removed from the equation, there is little, if any, relationship between the size of a network's audience and the amount of time its viewers spend watching. There are now many examples of both small-but-loyal and small-but-disloyal audiences. This is essentially the kind of audience behavior that characterizes highly competitive radio markets (Barnes, 1990; Dick & McDowell, 2004).

Whether the big-three will continue to occupy a privileged position in the future is a question that deserves further study. In any event, it is clear that the days when one television network could routinely command the attention of the nation are over, and there is no media institution on the horizon to inherit that function. Must this, as Katz (1996) feared, deal a critical blow to our shared sense of national identity? A part of the answer lies in understanding the dynamics of audience polarization.

Variable and generally modest levels of polarization lie beneath the surface of the fragmented audience. Much of this is driven by the structure of the media environment itself. Many networks are simply unavailable to substantial subsets of the population, creating a de facto polarization of the audience. Further, with the exception of premium services, or specialized channels on costly tiers of service, this source of polarization seems largely unrelated to content or viewer preferences. These structural factors, however, explain only half the variance in cumulative audiences. Even if all channels were universally available, polarization would still be evident.

It is well established that in multichannel environments, people maintain repertoires far smaller than the number of channels at hand (Ferguson & Perse, 1993; Neuendorf et al., 2001; Nielsen, 2003). So even when channels are technically available, they go unwatched. The data contain many examples of networks that have TVHH universes far in excess of their weekly cumes, including A&E, ESPN, Spike TV, MTV, CNBC, the Cartoon Network, the Food Network, even PAX and UPN. The audience for each of these networks is "loyal" in so far as they are more likely than the general population to watch them. This is obviously the result of systematic preferences for types of content. Even so, it is far from the kind of lock-step loyalty one might expect from the application of a traditional notion of selective exposure to information. Nor does this picture comport with the direst predictions of social polarization.

Dystopian portrayals of the new media environment often envision the mass audience disaggregating into more or less self-contained communities of interest: The common public sphere is broken into many "sphericules" or "enclaves" (see Gandy, 2001; Gitlin, 1998; Sunstein, 2001). This is more than mere fragmentation; it is polarization with a vengeance. Turow (1997) offered the most extensively developed of these portraits. He saw advertisers and new media technologies breaking America into the equivalent of "gated" communities.

Measures of polarization offer a way to assess how much time people spend behind those gates. Consider three networks that cater to specific segments of the

audience: Black Entertainment Television (BET), MTV, and FOX News. BET provides "entertainment, music, news and public affairs programming for the African-American audience" (NCTA, 2004, p. 53). MTV offers "youth-oriented programming," including music videos and many regularly scheduled series. FOX News claims to offer "fair and balanced coverage of the day's events," but is widely regarded as appealing to a politically conservative viewership. Each reaches a modestly sized audience, with weekly cumes of 14%, 26%, and 27%, respectively. Those who tune into BET or MTV spend less than 3% of their time with those channels. Even the audience for FOX News, with its high TSV, spends 92.5% of its time watching something else on television. The rest of their time is widely distributed across the channels they have available. Of course, it may be that even a little exposure to certain materials has big social effects, but if these viewers live in cloistered communities, they evidently spend a good deal of time out and about.

These findings are consistent with early studies of Internet usage (e.g., Webster & Lin, 2002). According to Neuman, "research thus far on Web behavior reveals diverse personal interests but a surprising balance among specialized and 'mainstream' sites among new and experienced users" (2001, p. 311). Perhaps, instead of bingeing on one type of content, American media users are more "omnivorous" (Holt, 1998; Peterson & Kern, 1996). Before we can truly understand the diet of media consumers, though, we need to look beyond the usage statistics of any one medium and study people's exposure to specific types of content across all media.

It remains to be seen whether a varied diet characterizes media consumption worldwide. Fragmentation is occurring everywhere. Television viewers in Beijing now have access to over 70 channels of television (CSM, 2002). New, satellite-delivered networks are spanning national borders. Much of this is being driven by the same economic and technological factors that are shaping the American audience. Imagine something similar to Table 1 with data across all the world's major networks. What would the audience for Aljazeera or Al-Arabiya look like? The combined weight of religion, language, and culture may well polarize global audiences with a force that is unimaginable in the American marketplace.

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