

The Big Three's Prime-Time Decline: A Technological and Social Context

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This paper is an analysis of factors associated with the 25-year decline in the prime-time shares of the top 3 television networks. Time series analysis revealed a stronger serial correlation between network decline and social indicators than between network decline and technological factors. Network shares were negatively correlated with indicators of social differentiation, and were also negatively correlated with the penetration of cable and other multiple video programming distribution sources (MVPD) into the nation's households (the technological context). Findings were discussed in terms of the impact of social change on both the audiences and organizations of broadcasting.

In the past 25 years, the Big Three broadcast television networks, ABC, CBS, and NBC, have experienced a significant decline in the share of the prime-time viewing audience. In 1980, more than 90% of television viewers were tuned in to one of these three networks during prime time. By 2005, the season ending average prime-time share of the Big Three networks had fallen to 32%. This means that during the 2004–2005 television season, fewer than one in three households using television during prime time were tuned to ABC, CBS, or NBC (Head, Sterling, & Schofield, 1984, p. 105; Nielsen Media Research, 2005; Owen & Wildman, 1992).

Explanations for the decline vary. In the early 1990s, network executives denied that a change in viewing was taking place. Instead, they insisted that Nielsen's new PeopleMeter was underestimating the size of network audiences (Piirto, 1993). The more common explanation for the decline of Big Three network shares of the television viewers was competition for viewers from new cable networks, new broadcast networks, and home viewing of VCR/DVDs (Carman, 1999; Carter, 1992; Dimmick, 2003; Henke & Donohue, 1989; Kaplan, 1978; Krugman & Rust, 1987, 1993; Lin, 1994; Ross, 1999). The penetration of remote control devices into the majority of television households during this time period also made it easier for viewers to casually surf through the new channels (Ferguson, 1994). In addition to these technological

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explanations, one might also ask about the social changes that accompanied the technological changes (Parsons, 2003).

This paper is an analysis of technological and social factors associated with the 25-year decline in the prime-time shares of the top three broadcast television networks.

The Substitution Hypothesis

The decline of the Big Three's prime-time shares indicates that those using television during prime-time are watching less ABC, CBS, and NBC programming, and are instead viewing more programming offered via other television sources, discussed below, such as: new broadcast networks; new networks available exclusively on multi-channel video program distributors (MVPD) such as cable television, DBS, and home satellite dishes (HSD); or videocassettes/DVDs (FCC, 2006; Krugman & Rust, 1987, 1993; Lin, 1994).

Over the same period that broadcast shares have fallen, new broadcast networks have been established: Fox; ION Television Network, formerly PAX TV; CW Network, formerly WB and UPN; and MyNetworkTV, formerly News Corporation-owned UPN stations that were stranded by the UPN-WB merger (Romano, 2006a; Seid, 2006). These new networks earned a season-ending average 16 share in 2004–2005, which represents half the 32 share of the Big Three networks (Nielsen Media Research, 2005). Among Spanish-language viewers, Telemundo, Univision, and Azteca have also become formidable competitors to the Big Three (Romano, 2005).

Cable television, in combination with other multiple video program distribution (MVPD) providers such as DBS, has been growing steadily since 1980, and in 2005 reached over 85% of television households (FCC, 2006). Among subscription-based MVPD sources, cable television has dominated. Cable penetration, measured as the percentage of U.S. television households with cable, has increased from just over 20% of households in 1980 to just over 60% in 2005 (Brown, 2004; FCC, 2006). Both cable and the VCR have displaced broadcast television on the time spent dimension (Dimmick, 2003).

The growth in cable penetration accelerated following the FCC's 1972 Open Skies order, the production of affordable downlink dishes by Scientific Atlanta, and the growth in program providers such as Home Box Office and Ted Turner's Superstation, later called WTBS (Parsons, 2003). As more cable networks were born, cable started to differentiate itself from broadcast TV, and became the "television of abundance" (Bates & Chambers, 2004). Cable penetration peaked in 1998 at 66.8%, and has declined slowly since. Satellite television penetration has grown since the mid 1990s on the success of Direct Broadcast Satellite (DBS) services (FCC, 2006).

What this all means is that the Big Three networks faced a very different competitive environment in 2005 than they did in 1980. In 1980, American homes had an average of 10.2 television channels from which to select (Compaine, 2000). In 2004, the

majority of subscribers had between 54 and 90 channels available (Warren, 2004). Videocassettes, DVDs in combination with multiple sets within households, and multimedia remote control devices, have further contributed to the "proliferation of choices" that has led to a decline in broadcast network shares (Ferguson, 1994; Henke & Donohue, 1989; Krugman & Rust, 1993).

One might argue that the decline in Big Three prime-time television network shares is the result of increasing use of home computers. But, the "share" measurement is based only on those individuals or households using television during the time period, and so a computer user who is not simultaneously watching television would not count against the Big Three network share. It is a different matter altogether when a computer user is watching a download of a broadcast or cable television network program. In that case, ratings reports will eventually include all forms of television program viewing, including computer downloads, via cell phones, PDAs, and even Play Station Portables (Dickson, 2006; Gerbrandt, 2006). Regardless, evidence of time displacement between computers and television is mixed. Both substitution and complementary effects have been documented (Dutta-Bergman, 2004; Kayany & Yelsma, 2000; Lin, 2004; Robinson, Barth, & Kohut, 1997).

It stands to reason that simple economic forces are at work in the decline of Big Three prime-time shares. The substitution hypothesis has a long history in media research (for a review, see Dutta-Bergman, 2004). Among those competition-based theories is the principle of relative constancy which suggests that consumer and advertiser spending on mass media is relatively constant, and what changes with the introduction of new media is simply the way the consumers' resources are distributed (McCombs & Eyal, 1980).

Contrary to the principle of relative constancy, time spent with media has increased since 1980. In 1980 the average American home had a television on for 6.60 hours per day, but in 2004, this number had increased to 8 hours, 11 minutes per day (FCC, 2006). This is consistent with Wood's (1986) and Wood and O'Hare's (1991) re-examination of the data from McCombs and Eyal's (1980) study in which the authors rejected the notion that new media necessarily displace old media. Wood (1986) argued that economic growth and lower prices for media hardware may hide an increase in demand for new media, even as media spending may show a declining proportion of consumer spending. Time spent with media also increased in the 1950s. Additional time spent with new media came at the expense of reading, radio listening, and a number of other daily activities, including sleep (Owen, 1999, p. 11).

The network share is a good indicator of the relative commitment of consumers to one form of television over another, even as the total time spent with television has increased. One might argue that the Big Three networks offer a unique form of television that emphasizes mass, as opposed to niche, audiences. Evidence that the Big Three networks are increasingly abandoning niche programming in favor of mass audience programming is shown by the steady decline in program diversity of prime-time programming between 1954 and 2003 (Einstein, 2002).

Attention to a particular channel is a zero sum game in that one channel's viewers comes at the expense of another's (Owen & Wildman, 1992, p. 165). Thus, the average television audience share would be expected to decline when the number of available channels increases (Picard, 2002). A negative relationship between measures of multiple video program distribution and broadcast network shares would be an indication of substitution between the two media (Krugman & Rust, 1987, 1993; Levy & Pitsch, 1985, p. 66). Thus:

H₁: The greater the penetration of MVPD into households, the lower the Big Three share of prime-time viewers.

The most common explanations for the precipitous decline of the Big Three prime-time shares are technological. But one might also ask about social conditions that provide the climate in which those technologies can thrive. In other words, what changes occurred during the past 25 years that were also associated with the network decline?

The Social Differentiation Hypothesis

As the nation grows, it becomes more diverse in ethnicity, occupations, interest groups, lifestyles, and myriad other observable social categories. This increase in social heterogeneity and complexity associated with population growth is called *social differentiation*.

Social differentiation, a theory that can be traced to Spencer's (1860/1891) applications of organic analogies to social change, has implications for a number of phenomena, including information and entertainment preferences, media organizational characteristics, citizen behaviors, and media coverage (Demers, 1996; Hindman, 1996; Tichenor, Donohue, & Olien, 1980). Social differentiation, also called *structural pluralism*, is defined as the degree of heterogeneity along institutional and specialized interest group lines, in a way that determines the potential sources of organized social power (Tichenor et al., 1980, p. 16). Social systems with greater social differentiation have more potential sources of political and economic power than do more homogenous social systems (Clark, 1968; Hindman, Littlefield, Preston, & Neumann, 1999).

Focusing on the individual level of analysis, researchers explain media choice in terms of how well each medium satisfies an audience member's expectations, or gratifications sought, from a repertoire of channels (Dimmick, 2003; Neuendorf, Atkin, & Jeffres, 2001; Reagan, 1995). Ruggiero (2000) argues that a media environment characterized by interactivity, demassification, and asynchronicity has revived research interest in how audience motivations and satisfactions affect viewing behavior.

It is also reasonable to expect that greater aggregate levels of diversity in the audience results in greater diversities in the gratifications sought from the medium (Atkin,

2002). For example, as the percentage of the population that prefers Spanish-language programming grows, viewing of new broadcast and cable networks targeted at that audience would be expected to grow at the expense of the Big Three networks. Innovations such as cable television and home satellite systems would be expected to diffuse more rapidly throughout a social system in which the innovations are compatible with existing needs and values and that show relative advantage or competitive superiority vis a vis other technologies (Dimmick, 2003; Rogers, 1995).

Technology has changed since 1980, but so has the nation. Most obviously, the nation has grown (U.S. Census Bureau, 2001). In 1980, there were an estimated 76 million television households in America. By 2004, this number had grown to 108 million (FCC, 2006).¹

In addition to population growth since 1980, the nation has experienced other significant changes that might be related to fragmentation of the network audiences. In particular, the nation has become more racially and ethnically diverse. In 1980, 86% of Americans defined themselves as White; in 2004, the number had fallen just over 80% (U.S. Census Bureau, 2006). The Hispanic population grew 61% between 1990 and 2001, making it the fastest growing group in the country (Grillo, 2003). Broadcast networks Univision, Telefutera, Telemundo, and Azteca America, as well as Spanish language cable networks, deliver significant proportions of the Hispanic and Spanish-language market (Grillo, 2003).

Along with greater ethnic and racial diversity, the nation has seen a significant decline in participation in voluntary and civic organizations, an increase in the level of educational achievement, and a concurrent decline in both social trust and trust in social institutions (Moy, Pfau, & Kahlor, 1999; Putnam, 2000). Putnam (2000) implicated television as one of the many factors leading to the decline in social participation and trust—a point disputed by scholars using more refined measures of television viewership (Moy, Scheufele, & Holbert, 1999; Shah, 1998; Uslander, 1998). Declining trust in social institutions coincides with declining trust of television network news. Between 1985 and 2002, the average percentage of Americans who rated ABC, CBS, and NBC news as highly believable declined from 83 to 65% (Project for Excellence in Journalism, 2004).

One might argue that declining levels of trust in media and social institutions are also the result of changes in the nation as a whole. Since 1980, governmental and private organizations have instituted numerous mechanisms for mediating disputes between citizens and organizations, including public hearings where citizens can air grievances and raise formal challenges against powerful institutions and individuals. The number of lawyers, the amount spent on law, and the number of civil trial dispositions in Federal Courts has grown over this period, although the number of trials has declined (Galanter, 2004). As the nation becomes more diverse and its institutions become more formalized, citizens have a greater number of mechanisms for expressing skepticism towards those institutions (Tichenor et al., 1980).

Greater diversity in the population along occupational, ethnic, educational, or relational lines can be more formally described as greater degrees of structural com-

plexity or differentiation (Warriner, 1984, p. 101). Dimmick (2003) drew from organizational ecology theories to hypothesize niche relationships among competing industries. Similarly, Demers (1996) drew from classical sociological theory to hypothesize a positive relationship between newspaper organizational structure and the degree of differentiation of the nation. Applying the social differentiation hypothesis to the case of declining Big Three network shares, it is hypothesized that

H₂: The greater the social differentiation within the nation, the greater the decline of Big Three Network shares.

Network Responses

In the language of social systems, to survive in a changing social environment, the organization must change as well (Katz & Kahn, 1978). The principle of requisite variety states that the organization's (network) complexity must match the complexity of the environment (social differentiation) in order to continue to extract resources from that environment (Morgan, 1986, p. 47.) Hence, one would expect to observe a relationship between the complexity of the social system and the complexity of an organization within that social system (Demers, 1996; DuBick, 1978; Griswold, 1999).

This raises the question of the success of the Big Three networks' organizational responses to the changing social environment. The precipitous decline of the Big Three's shares may lead to the conclusion that the networks have failed to meet the principle of requisite variety and are doomed as organizational forms. However, the networks have not taken the case of declining shares lightly. Two strategies all organizations can use for growth are diversification or mergers and acquisitions (Picard, 2002, pp. 197–199). Successes in lobbying made many of these changes possible.

The history of commercial network domination of the U.S. broadcasting system has shown that, from the beginning, networks have been successful in influencing legislation and rules favorable to the industry (McChesney, 1993). The television industry has successfully lobbied the FCC and Congress for the repeal of financial interest/syndication rules (fin-syn) which allowed broadcast networks to control profits and syndication income from network-produced programs (Dell, 2003; Entertainment Law Reporter, 1995). Networks also benefited from the relaxation of limits on group ownership of local television stations, and have since become among the top six group owners of local television stations (FCC, 2003; Higgins & Winslow, 2006; Mondaq, 2004).

In addition to purchasing the maximum number of highly profitable local stations, networks and their corporate parents have grown through mergers with Hollywood studios and distribution companies, as with CBS/Paramount/King World, ABC/Disney/Buena Vista/Touchstone, and NBC/NBC Universal, and have invested heavily in cable channels, Spanish-language networks, new broadcast networks, and online properties (Carter, 1999; Gal-Or & Dukes, 2006). The Big Three Networks' parent or-

ganizations grew in order to spread the organizations' economic risks, to smooth profit fluctuations, to take advantages of economic opportunities, to achieve economies of scale, to vertically integrate production and distribution channels, to create barriers to new competition and to eliminate some of the competition (Ozanich & Wirth, 2004, pp. 76–77; Picard, 2002, pp. 197–198).

A measure of the success of the networks' response to the changing social environment is operating income. A positive correlation between network operating income and social differentiation would indicate that, in spite of the decline in prime-time shares, the networks and their parent companies have managed to at least keep pace with the changing social environment.

RQ₁: Is there a relationship between the Big Three television networks' operating income and social differentiation?

Methods

Big Three Network Share

Data on the combined shares for the three networks over the past 25 years, originally collected by Nielsen Media Research, were obtained through *Broadcasting and Cable's* annual Week 52 (generally, the issue from the last week of September) season-to-date average household share of prime-time viewers (Nielsen Media Research, 2005). Data for 1980 through 1989 came from Robins (1989, p. 73) because *Broadcasting* did not regularly include network share data during these years. Data were subjected to log transformations to correct for a skewed distribution.

Cable and MVPD Penetration Rate

The U.S. penetration rate of multiple video programming distribution (MVPD) from 1989 to 2004, operationalized as number of subscribers over total number of U.S. television households, came from the Federal Communications Commission's annual reports to Congress on competition in the video marketplace (FCC, 1995, 2002, 2006); and for 1980 to 1990 from Brown (2004).

Social Differentiation

The second hypothesis and the research question require an indicator of social differentiation. This study constructed a social differentiation index that was the sum of standardized measures of the U.S. population, percent of the population with 4 years of college or higher and the percentage of the population that was not White, using data from the U.S. Bureau of the Census. The U.S. population was chosen as an indi-

cator because previous studies have shown it to be highly correlated to other indicators of heterogeneity, and because greater population means formerly ignored audience segments are more likely to achieve economic and political power (Demers, 1996). Educational attainment and ethnic diversity were chosen because each indicates potential sources of organized social power. Data are shown in Table 1.

Network and Corporate Family Operating Income

All financial data were defined as the "Operating Income" from each network's segment operations. The operating income of ABC, CBS, and NBC were determined

Table 1
Big Three Television Network Season Average Prime-Time Shares, MVPD
Penetration, Social Differentiation Indicators,
and Income, by Year

Year	Network Share %	MVPD %	Non-White%	U.S. Pop. (000)	College Grad %	Social Differentiation	Big Three Income ^a
1980	90	22.6	14.1	227.225	17	95.5	565.5
1981	85	25.3	14.3	229.466	17	95.7	489.1
1982	83	29.0	14.5	321.664	18	96.1	467.5
1983	81	37.2	14.7	233.792	19	96.7	602.0
1984	78	41.2	14.9	235.825	19	97.0	703.7
1985	77	44.6	15.1	237.924	19	97.3	303.8
1986	76	46.8	15.3	240.133	19	97.5	849.8
1987	75	48.7	15.5	242.289	20	97.9	1201.9
1988	70	49.4	15.7	244.499	20	98.2	1763.0
1989	67	53.5	15.9	246.819	21	98.7	1225.2
1990	60	55.5	16.1	249.623	20	98.7	962.2
1991	60	60.0	16.3	252.981	21	99.3	521.8
1992	60	61.8	16.4	256.514	21	99.6	582.7
1993	57	64.0	16.6	259.919	22	100.1	861.6
1994	57	67.0	16.7	263.126	22	100.5	1201.4
1995	54	71.4	16.8	266.278	23	101.0	1180.1
1996	51	74.6	16.9	269.394	24	101.5	1305.5
1997	47	75.9	17.0	272.647	24	101.9	2026.5
1998	44	78.2	17.1	275.854	24	102.3	1784.4
1999	41	81.4	17.2	279.040	25	102.8	2203.2
2000	42	83.8	18.9	282.224	26	103.4	2295.3
2001	40	84.2	19.1	285.318	26	103.9	2650.0
2002	36	83.0	19.3	288.369	27	104.4	2989.9
2003	34	84.2	19.4	291.028	27	104.8	3470.3
2004	34	85.1	19.6	293.907	28	105.2	4482.5

Note: ^aThe operating income values were adjusted for inflation.

by examining the financial statements of each network from 1980 until 2004 (the most recent year available). Because the network ownership changed throughout the company's history, the appropriate financial statement had to be used for each year.² Network operating income data were corrected for inflation using the Gross Domestic Product Implicit Price Deflator (U.S. Department of Commerce, 2005).

The analytical strategy in the present study followed that of Demers (1996) which explained the impact of social change on newspaper organizational structure. The data used for this analysis are a time series; estimates of the degree of autocorrelation, or correlated error terms, must be included. The Durbin-Watson D statistic provides an estimate of the degree of autocorrelation. Prais-Winsten regression is used, which produces smaller R-squared values than the OLS model by adjusting the size of the error terms, bringing the Durbin-Watson D statistic to within a tolerable range.

Results

The substitution hypothesis was that the greater the penetration of MVPD into households, the lower the Big Three share of prime-time viewers. The results relevant to the substitution hypothesis are shown in Table 2 which indicates that the hypothesis was supported.

The results from the second model in Table 2 show that the equation is statistically significant. As MVPD penetration increases, the network shares decline, as indicated by the negative slope coefficient. The R-squared value in equation 2 of Table 2 is reduced from the equation 1 OLS R-squared values as a result of the Prais-Winsten correction (to .71 from .92). The value remains extremely high, however, partially as a result of the relatively small number of observations. Regardless, the results show that the first hypothesis was supported. It is important to note, however, that the findings do not demonstrate causation, as a time order relationship has not been established.

Table 2
Big Three Television Network Season Average Prime-Time Shares
a Regressed on U.S. Household Penetration by Multi-Video
Program Distributors

Model ^b	Slope	SE	p =	Adj. R ²	SE	Durbin-Watson ^c
1. OLS ^d	-1.47 (10 ⁻²)	8.84 (10 ⁻⁴)	.000	.92	.09	0.34
2. Prais-Winsten Regression	-1.34 (10 ⁻²)	1.73 (10 ⁻³)	.000	.71	.05	1.41

Note: ^a The prime-time shares variable is a log transformation of the raw data. ^b Sample size for each model is 25. ^c Durbin-Watson values less than 1.29 indicate the presence of positive autocorrelation; those greater than 1.45 indicate a negative autocorrelation. ^dOrdinary least squares regression.

The small number of degrees of freedom in the equation restricts the number of independent variables that can be controlled.

The social differentiation hypothesis stated that the greater the social differentiation within the nation, the greater the decline of Big Three Network shares. The hypothesis was supported as is shown by the significant and negative slope coefficient and the high R-square values in Table 3. The Durbin-Watson statistic in equation 1 of Table 3 (1.37) indicates that autocorrelation was not present and thus the ordinary least squares (OLS) regression results were appropriate. The adjusted R-square value is again inflated, likely as a result of the small number of cases. Regardless, the hypothesis was supported.

Finally, the research question explored network reactions to the changes in the social environment in operating income. Table 4 shows a time series analysis of network operating income and social differentiation. The low Durbin-Watson value (.53) in model 1 indicates the presence of positive autocorrelation. Model 2 results show the

Table 3
Big Three Television Network Season Average Prime-Time Shares^a
Regressed on the Social Differentiation Index

Model ^b	Slope	SE	$p =$	Adj. R ²	SE	Durbin-Watson ^c
1. OLS ^d	-0.10	2.86(10 ⁻³)	.000	.98	.04	1.38
2. Prais-Winsten Regression	-0.10	3.83(10 ⁻³)	.000	.97	.04	1.79

Note: ^aThe prime-time shares variable is a log transformation of the raw data. ^bSample size for each model is 25. ^cDurbin-Watson values less than 1.29 indicate the presence of positive autocorrelation; those greater than 1.45 indicate a negative autocorrelation. ^dOrdinary least squares regression.

Table 4
Big Three Television Network Operating Income^a Regressed
on the Social Differentiation Index

Model ^b	Slope	SE	$p =$	Adj. R ²	SE	Durbin-Watson ^c
1. OLS ^d	313.2	35.1	.000	.77	513.2	.58
2. Prais-Winsten Regression	335.3	57.5	.000	.57	400.4	1.32

Note: ^aOperating income values were adjusted for inflation. ^bSample size for each model is 25. ^cDurbin-Watson values less than 1.29 indicate the presence of positive autocorrelation; those greater than 1.45 indicate a negative autocorrelation. ^dOrdinary least squares regression.

Prais-Winsten corrected error terms results in a statistically significant and positive slope, and an adjusted R-square of 54%. The results suggest that the Big Three network adjustments to social changes were successful as measured by network operating income.

Discussion and Summary

The phenomenon of declining prime-time shares of the Big Three broadcast television networks has traditionally been explained as being the result of displacement effects resulting from new forms of television competition. This study tested this substitution hypothesis as well as a social differentiation hypothesis which explained network share decline in terms of social changes. The two hypotheses represent competing theories of social change: technological determinism and social determinism (Rogers, 2002).

The Substitution Hypothesis

The current study's findings of a strong relationship between the availability of alternatives to network programming and the Big Three prime-time shares is consistent with the idea that, all other things being equal, more choice means more competition. Viewers did seem to be making more time for television, with the average time that television sets were on in households increasing about 20% in the past 25 years. One would expect that some of this increased viewing time was devoted to watching cable networks such as CNN and ESPN which offer alternatives to those who are unavailable to watch regularly scheduled news and sports programming on the networks and local affiliates. Yet, the majority of viewing of the newly available channels is likely at the expense of ABC, CBS, and NBC's prime-time schedules as would be expected from the principle of relative constancy.

Simple substitution models do not explain why some channels drew more viewers than others. In spite of the plethora of choices, nearly all viewers include the Big Three networks in their repertoire (Neuendorf et al., 2001). The decline in the Big Three prime-time shares is the combined effect of a number of cable channels directed at small percentages of the audience, or, as one network executive described it, "like getting pecked to death by ducks" (Lowry, 1997, p. F1).

A regression model using the penetration of cable and other multiple video program distribution channels to predict a log transformed measure of network prime-time shares from 1980 through 2004, and corrected for autocorrelation, explained 71% of the variance. Although high by social science standards, the R-squared value indicates something less than an ideal fit, and indicates that other factors must be considered.

Social Differentiation

Why have the various technologies for delivering multiple video programming channels into the home flourished as the Big Three broadcast television networks have languished? This requires an examination of social factors that set the stage for technologies and that determine the technologies' relative advantages (Rogers, 1995) or competitive superiority (Dimmick, 2003).

Findings showed a strong serial correlation between a measure of the degree of social differentiation of the United States throughout the 25-year period, and the decline of Big Three network shares. The social differentiation variable explained 98% of the variance in the log of the prime-time shares, indicating an extremely close fit and indicating that the social differentiation hypothesis was a better explanation than was the substitution hypothesis.

These findings are consistent with the hypothesis that the Big Three television networks became increasingly ill-suited to please all the people, all of the time. Broadcast television networks are designed to reach the broadest possible audiences. What has changed over the past 25 years is the broadest possible audiences are scattered across a variety of places and times. Audience fragmentation is not just a matter of specialized interests and preferences. Audiences are also fragmented across both time and space.

In a highly fragmented, highly scheduled, and socially complex nation, families and individuals cannot be expected to follow the same old rules of sitting down in front of the television set at appointed times to watch an evening's worth of programming designed for least common denominator tastes. Time shifting provides some relief for overscheduled families. However, network share data includes programs captured through a variety of traditional recording devices, regardless of whether the program is watched once it is recorded. Further, newer technologies for time shifting such as personal video recorders or video on-demand services accounted for only an estimated 4% of all television viewing in early 2006, although the impact on specific programs may be greater (Leightman Research Group, 2006). Nielsen also has plans for measuring viewing whenever and wherever it occurs, which might recapture some of the unmeasured network audience (Gerbrandt, 2006). Technologies that offer both time shifting and place shifting, and technologies that offer 24-hour news, sports, and entertainment programming can be expected to flourish in an increasingly interdependent and information-intensive social environment.

With social differentiation comes increased skepticism of institutions. In this environment, audiences no longer can be expected to believe it when told "that's the way it is" by a grandfatherly, Caucasian news anchor. Distrust of social institutions is not, as Putnam (2000) argues, the result of too much television viewing. Instead, distrust can be viewed as a healthy and honest recognition that institutions do not benefit everyone equally, particularly when "everyone" is an increasingly diverse mix of potential sources of organized social power (Tichenor et al., 1980).

The growing audience fragmentation, of which declining network viewership is but one measure, can also mean a decline in national shared moments, and an increase in partisanship. As networks continue to expand distribution of content via increasingly specialized outlets, further audience fragmentation can be expected (Tewksbury, 2005). But one must also keep in mind that all of these changes take place within the existing social and economic framework in which continuities will exceed change, and where corporate consolidation will be more common than will be media convergence (Golding, 2000; Neuman, 1991).

Organizational Response to Environmental Change

From a financial standpoint, it is apparent that the Big Three have responded effectively to the rapid decline in prime-time shares. Table 1 shows that the combined operating incomes of the Big Three networks have grown since 1980. The impact of cable television on broadcast television's revenues is rather small, in part because advertising revenue for all media increased which cushioned competition between cable and broadcast television (Dimmick, 2003). The cable industry coexists with broadcast television by specializing into a narrow niche that focuses on small audiences, national advertising, and subscription revenues (pp. 60–62).

In spite of the network losses in viewers, advertising rates continue to rise because networks still provide one of the few remaining means of reaching a mass audience. In a highly fragmented world, that capacity to deliver "tonnage," or sheer audience size, is increasingly valuable (Dimmick, 2003).

Some caution is warranted when interpreting the findings, given the nature of the data. Network shares, MVPD, and social differentiation are necessarily crude, macro-level measures that share multiple sources of covariation, particularly when presented in a time series. Future studies should include analyses of: the prime-time average share of cable versus broadcast networks and broadcast network-owned cable channels; network viewership among various ethnic groups; cable profits as a percentage of the Big Three's total corporate operating income over the last 25 years; and network income from ownership and distribution of programming and ownership of local stations as well as from owned and operated stations.

Notes

¹In 2004, the networks' share was only 37% of its 1980 share. Raw viewership, however, decreased to 54% of its 1980 numbers over the same period, estimating a relatively constant 59% HUT (Walker & Ferguson, 1998, p. 129).

²A full description of the method for determining corporate histories and for selecting the appropriate financial statement for each year is available from the authors.

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