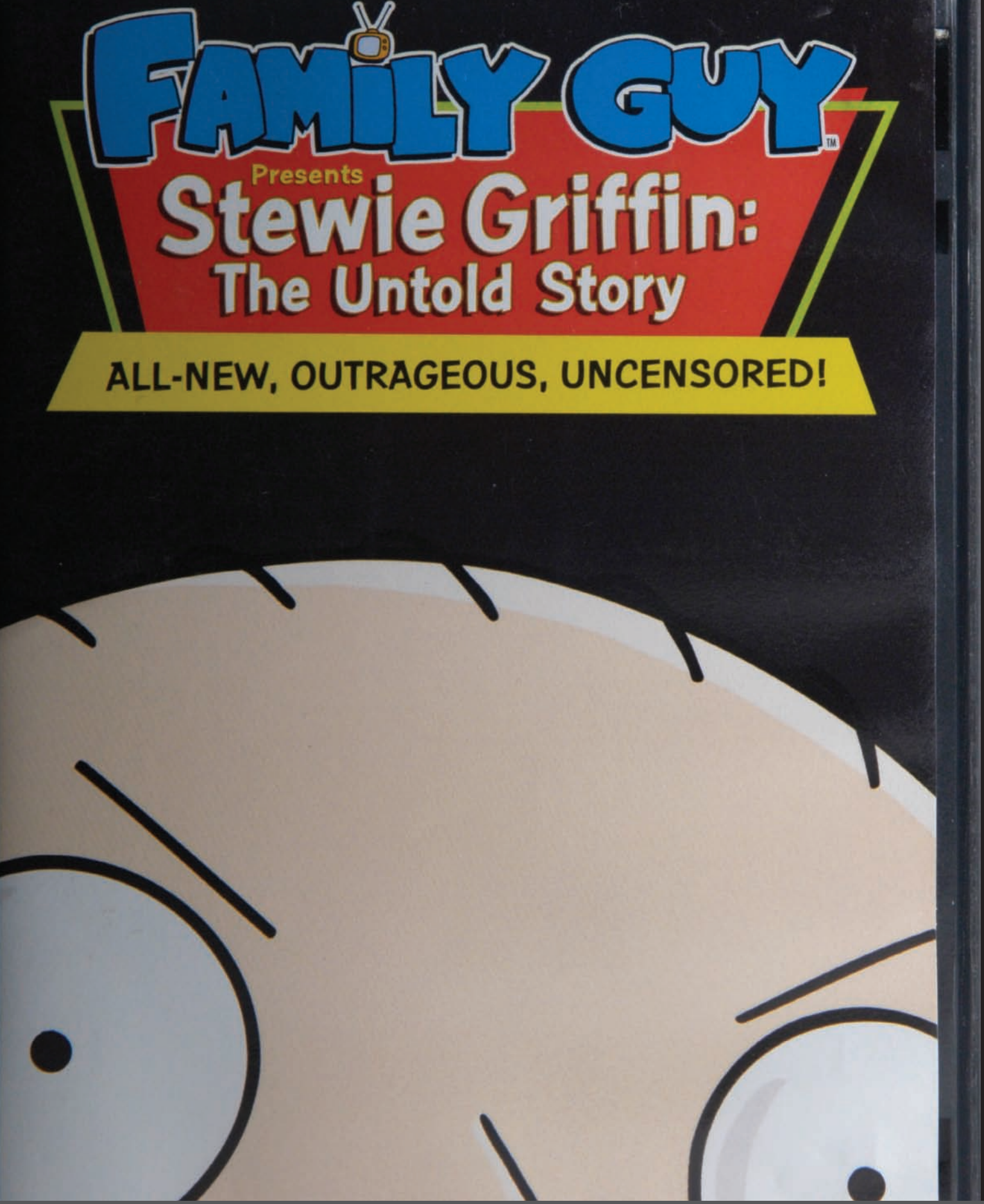


Family Guy DVD—all-new, outrageous, uncensored, and unprecedented.

Television, Cable, and Mobile Video

8

LEARNING OBJECTIVES

No one is neutral about television. We either love it or hate it. Many of us do both. The reason is that it is our most ubiquitous and socially and culturally powerful mass medium. Recent and on-the-horizon technological advances promise to make it even more so. After studying this chapter you should

- be familiar with the history and development of the television and cable television industries and television itself as a medium.
- understand in detail how television programs move from concept to broadcast.
- recognize how the organizational and economic nature of the contemporary television and cable industries shapes the content of television.
- understand the relationship between television in all its forms and its viewers.
- be aware of new and emerging video technologies and their potential impact on the television industry and its audience.
- have a clearer concept of the digital and mobile television revolution.
- possess improved television-viewing media literacy skills, especially in recognizing staged news and testing your personal level of control over your viewing.

"Did you watch TV last night?"

"Nope. I was studying, and when I wasn't studying, I was working on my history paper. Why?"

"You missed a great *Family Guy*. Stewie decides to find his roots and . . ."

"Saw it."

"No way. They said it was an 'all-new episode.'"

"Saw it."

"Stop being so smug. So, if you didn't watch TV, how'd you see it? Download it to your computer? That still counts as watching TV. A video screen is a video screen."

"Nope. I saw it four months ago on DVD."

"No way."

"Way. Television is changing, my friend, more than you realize."

Fox Television surprised its fans and angered its affiliates when it edited together three episodes of the hit series *Family Guy* to create a DVD movie, releasing it months before the original episodes aired on its prime-time schedule. In 2007 the first television series produced specifically for cell phones debuted simultaneously on phones and the Internet. Each of *Afterworld*'s 130 episodes runs just over 2 minutes. Producer Stan Rogow explained why he resisted the SciFi Channel's request that he produce it as a traditional series television show, opting for phones and the Web: "I think this is where the TV industry is heading, and I also think that at the end of the day it will not necessarily be the end of network television, but I think it's going to be a different form of network television that will offer the

1923 Zworykin demonstrates electronic iconoscope tube

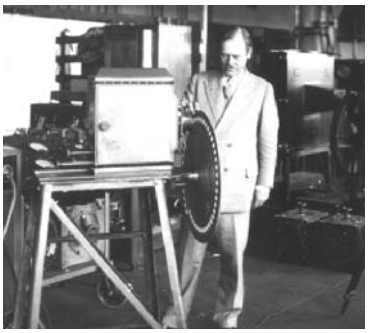
1928
Baird transmits mechanical video image across Atlantic

1941
First two commercial stations approved

1900

1925

1950



1939
Sarnoff introduces regular television broadcasting at World's Fair

1948
Television freeze; Walson begins CATV

1927
Farnsworth demonstrates electronically scanned television images

1950
Red Channels; Nielsen ratings

1884
Nipkow invents his disc

experience on multiple platforms" (in Moses, 2007). A long and bitter Hollywood writers' strike shut down television and film production in 2008. The issue was how writers would be paid when their work migrated from TV and movie screens to phone and computer screens. Yes, television is changing, and this chapter details that change, from early experiments with mechanical scanning to the electronic marvel that sits in our homes to the mobile video screens we may carry in our pockets. We trace the rapid transformation of television into a mature medium after World War II and examine how the medium, the entire television industry in fact, was altered by the emergence and success of cable and satellite television. But significant change is once again remaking what we currently know as

Afterworld, the first television series produced specifically for mobile phones.

1954
Army–McCarthy Hearings telecast

1962
All-channel legislation

1963
FCC begins regulation of cable

1976
VCR introduced

1999
DVR introduced

2007
Afterworld

2004
Cable content and pricing face government scrutiny

1998
First digital TV broadcast

1975

2000

1959
Quiz show scandal

1951
U.S. wired coast-to-coast; *I Love Lucy*

1975
HBO begins national distribution

1996
DVD introduced; Telecommunications Act

2002
FCC mandates digital receivers by 2007

2009
All TV stations are digital

2005
Networks begin selling program downloads; *Brand X* decision

television. The changes just mentioned reflect only a small part of the coming transformation. **Nonlinear TV**—watching television on our own schedules, not on some cable or broadcast programmer's—is here right now. Even more dramatic evolution is in the offing.

The remarkable reach of television—in all its forms—accounts for its attractiveness as an advertising medium. We discuss this reach, and we explore the structure, programming, and economics of the television and cable industries. We consider new technologies and their convergence with television and how they promise to change the interaction between the medium and its audiences. Finally, we discuss media literacy in terms of the practice of recognizing news staging.

A Short History of Television

After the printing press, the most important invention in communication technology to date has been television. Television has changed the way teachers teach, governments govern, and religious leaders preach and the way we organize the furniture in our homes. Television has changed the nature, operation, and relationship to their audiences of books, magazines, movies, and radio. The computer, with its networking abilities, may overtake television as a medium of mass communication, but television defines even its future. Will the promise of the Web be drowned in a sea of commercials? Can online information services deliver faster and better information than television? Even the computer screens we use look like television screens, and we sign up for Internet video, online video conferencing, and the new and improved computer video game. Before we delve deeper into the nature of this powerful medium and its relationship with its audience, let's examine how television developed as it did.

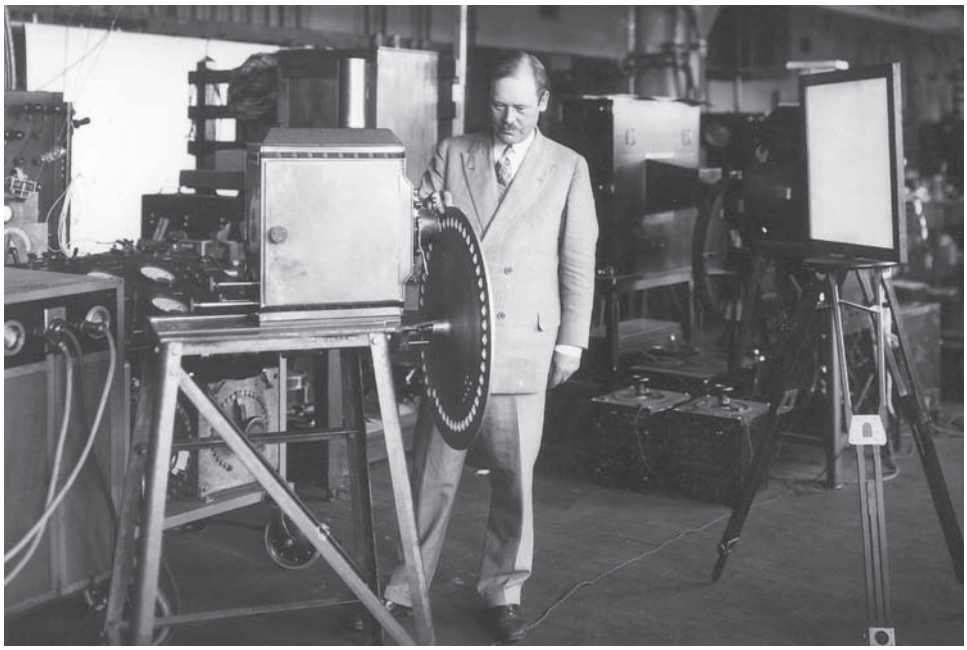
WWW

Television History
www.tvhistory.tv

Mechanical and Electronic Scanning

In 1884 Paul Nipkow, a Russian scientist living in Berlin, developed the first workable device for generating electrical signals suitable for the transmission of a scene that people

A Nipkow disc.



could see. His **Nipkow disc** consisted of a rotating scanning disc spinning in front of a photoelectric cell. It produced 4,000 **pixels** (picture dots) per second, producing a picture composed of 18 parallel lines. Although his mechanical system proved too limiting, Nipkow demonstrated the possibility of using a scanning system to divide a scene into an orderly pattern of transmittable picture elements that could be recomposed as a visual image. British inventor John Logie Baird was able to transmit moving images using a mechanical disc as early as 1925, and in 1928 he successfully sent a television picture from London to Hartsdale, New York.

Electronic scanning came either from another Russian or from a U.S. farm boy; historians disagree. Vladimir Zworykin, an immigrant living near Pittsburgh and working for Westinghouse, demonstrated his **iconoscope tube,** the first practical television camera tube, in 1923. In 1929 David Sarnoff lured him to RCA to head the electronics research lab, and it was there that Zworykin developed the **kinescope,** an improved picture tube. At the same time, young Philo Farnsworth had moved from Idaho to San Francisco to perfect an electronic television system, the design for which he had shown his high school science teacher when he was 15 years old. In 1927, at the age of 20, he made his first public demonstration—film clips of a prize fight, scenes from a Mary Pickford movie, and other graphic images. The "Boy Wonder" and Zworykin's RCA spent the next decade fighting fierce patent battles in court. In 1939 RCA capitulated, agreeing to pay Farnsworth royalties for the use of his patents.

WWW

Zworykin
www.ieee.org/web/aboutus/history-center/biography/zworykin.html

WWW

Farnsworth
www.invent.org/hall_of_fame/56.html

In April of that year, at the World's Fair in New York, RCA made the first true public demonstration of television in the form of regularly scheduled 2-hour NBC broadcasts. These black-and-white telecasts consisted of cooking demonstrations, singers, jugglers, comedians, puppets—just about anything that could fit in a hot, brightly lit studio and demonstrate motion. People could buy television sets at the RCA Pavilion at prices ranging from $200 for the 5-inch screen to $600 for the deluxe 12-inch-screen model. The FCC granted construction permits to the first two commercial stations in 1941, but World War II intervened. But as was the case with radio during World War I, technical development and improvement of the new medium continued.

The 1950s

In 1952, 108 stations were broadcasting to 17 million television homes. By the end of the decade, there were 559 stations, and nearly 90% of U.S. households had televisions. In the

Philo Farnsworth and Vladimir Zworykin, pioneers in the development of television.

1950s more television sets were sold in the United States (70 million) than there were children born (40.5 million) (Kuralt, 1977). The technical standards were fixed, stations proliferated and flourished, the public tuned in, and advertisers were enthusiastic. The content and character of the medium were set in this decade as well:

- Carried over from the radio networks, television genres included variety shows, situation comedies, dramas (including Westerns and cop shows), soap operas, and quiz shows.
- Two new formats appeared: feature films and talk shows. Talk shows were instrumental in introducing radio personalities to the television audience, which could see its favorites for the first time.
- Television news and documentary remade broadcast journalism as a powerful force in its own right, led by CBS's Edward R. Murrow (*See It Now,* 1951) and NBC's David Brinkley and Chet Huntley. Huntley and Brinkley's 1956 coverage of the major political conventions gave audiences an early glimpse of the power of television to cover news and history in the making.
- AT&T completed its national **coaxial cable** and **microwave relay** network for the distribution of television programming in the summer of 1951. The entire United States was now within the reach of the major television networks, and they came to dominate the medium.

Four other events from the 1950s would permanently shape how television operated: the quiz show scandal, the appearance of *I Love Lucy,* McCarthyism, and the establishment of the ratings system. Another, in 1948, would permanently *reshape* the television industry. That development, as you'll soon see, was cable television.

The Quiz Show Scandal and Changes in Sponsorship Throughout the 1950s the networks served primarily as time brokers, offering airtime and distribution (their affiliates) and accepting payment for access to both. Except for their own news and sports coverage, the networks relied on outside agencies to provide programs. An advertising agency, for example, would hire a production company to produce a program for its client.

WWW

Quiz Show Scandal
www.fiftiesweb.com/quizshow.htm

That client would then be the show's sponsor—*The Kraft Television Theatre* and *Westinghouse Studio One* are two examples. The agency would then pay a network to air the program over its national collection of stations. This system had enriched the networks during the heyday of radio, and they saw no reason to change.

But in 1959 the quiz show scandal, enveloping independently produced, single-advertiser-sponsored programs, changed the way the networks did business. When it was discovered that popular shows like *The $64,000 Question* had been fixed by advertisers and producers to ensure desired outcomes, the networks, mindful of their reputations, were determined to take control of their schedules. They, themselves, began commissioning or buying the entertainment fare that filled their broadcast days and nights. Now, rather than selling blocks of time to ad agencies and sponsors, the networks paid for the content they aired through **spot commercial sales** (selling individual 60-second spots on a given program to a wide variety of advertisers).

Running from 1947 until 1958, NBC's *Kraft Television Theatre* aired some of the golden age's most respected live anthology dramas. *Top left,* Richard Kiley and Everett Sloane; *lower left,* Ossie Davis; *lower right,* Walter Matthau and Nancy Walker.

As a result, the content of television was altered. Some critics argue that this change to spot sales put an end to the golden age of television. When sponsors agreed to attach their names to programs, *Alcoa Presents* or the *Texaco Star Theater,* for example, they had an incentive to demand high-quality programming. Spot sales, with network salespeople offering small bits of time to a number of different sponsors, reduced the demand for quality. Because individual sponsors were not identified with a given show, they had no stake in how well it was made—only in how many viewers it attracted. Spot sales also reduced the willingness of the networks to try innovative or different types of content. Familiarity and predictability attracted more viewers and, therefore, more advertisers.

There is a counterargument, however. Once the financial well-being of the networks became dependent on the programming they aired, the networks themselves became more concerned with program quality, lifting television from its dull infancy (remembered now as the golden age only by those small, early audiences committed to serious character-driven televised drama). Different historians and critics offer arguments for both views.

I Love Lucy and More Changes In 1951 CBS asked Lucille Ball to move her hit radio program, *My Favorite Husband,* to television. Lucy was willing but wanted her real-life

I Love Lucy was significant for far more than its comedy. Thanks to Lucille Ball's shrewd business sense, it became the foundation for the huge off-network syndicated television industry.

husband, Desi Arnaz, to play the part of her video spouse. The network refused (some historians say the network objected to the prime-time presentation of an interracial marriage—Desi Arnaz was Cuban—but CBS denies this). But Lucy made additional demands. Television at the time was live: Images were typically captured by three large television cameras, with a director in a booth choosing among the three available images. Lucy wanted her program produced in the same manner—in front of a live audience with three simultaneously running cameras—but these cameras would be *film* cameras. Editors could then review the three sets of film and edit them together to give the best combination of action and reaction shots. Lucy also wanted the production to take place in Hollywood, the nation's film capital, instead of New York, the television center at the time. CBS was uncertain about this departure from how television was typically produced and refused these requests as well.

Lucy and Desi borrowed the necessary money and produced *I Love Lucy* on their own, selling the broadcast rights to CBS. In doing so the woman now best remembered as "that zany redhead" transformed the business and look of television:

- Filmed reruns were now possible, something that had been impossible with live television, and this, in turn, created the off-network syndication industry.
- The television industry moved from New York, with its stage drama orientation, to Hollywood, with its entertainment film mind-set. More action, more flash came to the screen.
- Weekly series could now be produced relatively quickly and inexpensively. A 39-week series could be completed in 20 or 24 weeks, saving money on actors, crew, equipment, and facilities. In addition the same stock shots—for example, certain exterior views—could be used in different episodes.

WWW

McCarthyism
www.apl.org/history/mccarthy/biography.html

McCarthyism: The Growing Power of Television The Red Scare that cowed the movie business also touched television, aided by the publication in 1950 of *Red Channels: The Report of Communist Influence in Radio and Television,* the work of three former FBI agents operating a company called American Business Consultants. Its 200 pages

The Army–McCarthy Hearings. Wisconsin's junior Republican senator, Joseph McCarthy (seated at the far right), begins his June 9, 1954, testimony before his fellow senators regarding his claims that the army was rife with Communists, Reds, and "fellow travelers." Network coverage of the senator's erratic behavior helped bring the despot into disrepute.

detailed the pro-Communist sympathies of 151 broadcast personalities, including Orson Welles and journalist Howard K. Smith. Advertisers were encouraged to avoid buying time from broadcasters who employed these "Red sympathizers." Like the movie studios, the television industry caved in. The networks employed security checkers to look into people's backgrounds, refused to hire suspect talent, and demanded loyalty oaths from performers. In its infancy television had taken the safe path. Many gifted artists were denied not only a paycheck but also the opportunity to shape the medium's content.

Ironically, it was this same Red Scare that allowed television to demonstrate its enormous power as a vehicle of democracy and freedom. Joseph McCarthy, the Republican junior senator from Wisconsin whose tactics gave this era its name, was seen by millions of viewers as his investigation of Reds in the U.S. Army was broadcast by all the networks for 36 days in 1954. Daytime ratings increased 50% (Sterling & Kittross, 1990). At the same time, Edward R. Murrow used his *See It Now* to expose the senator's lies and hypocrisy. As a consequence of the two broadcasts, McCarthy was ruined; he was censured by his Senate colleagues and later died the lonely death of an alcoholic. Television had given the people eyes and ears—and power—where before they had had little. The Army–McCarthy Hearings and Murrow's challenge to McCarthyism are still regarded as two of television's finest moments.

WWW

Radio Television News Directors Association
www.rtnda.org

The Nielsen Ratings The concept of computing ratings was carried over from radio (see Chapter 7) to television, but the ratings as we know them today are far more sophisticated. The A. C. Nielsen Company began in 1923 as a product-testing company, but soon branched into market research. In 1936 Nielsen started reporting radio ratings and was doing the same for television by 1950.

WWW

A. C. Nielsen
www.nielsenmedia.com

To produce the ratings, Nielsen selects 15,000 households thought to be representative of the entire U.S. viewing audience. (It will expand its sample to 37,000 homes and 100,000 people by 2011.) To record data on what people in those TV households are watching, Nielsen employs the **peoplemeter,** a device requiring each member of a television home to press buttons to record his or her individual viewing. (Parents or guardians are responsible for recording children's choices.) The information recorded is sent to Nielsen by telephone lines, and the company can then determine the program watched, who was watching it, and the amount of time each viewer spent with it. But convergence is changing how ratings data will be gathered. Nielsen is rolling out its personal peoplemeter (Chapter 7), a special remote control with personalized buttons for each viewer in the household. The introduction of the personal peoplemeter has been anything but smooth, as you can see in the essay on page 214, "Can't Find Them or They Aren't There? Where Have All the Boys and Minorities Gone?"

To draw a more complete picture of the viewing situation and to measure local television viewing, Nielsen conducts diary surveys of viewing patterns four times a year. These **sweeps periods** are in February, May, July, and November. During sweeps, diaries are distributed to thousands of sample households in selected markets. Viewers are asked to write down what they're watching and who is watching it. The diary data are then combined with the peoplemeter data to help stations set their advertising rates for the next 3 months. The company announced in June 2006, however, that it would abandon paper diaries by 2011 and move to completely electronic measurement.

Sweeps, too, may soon be a thing of the past. These quarterly extravaganzas of heavily promoted network programming and titillating local news (High School Binge Drinking? Story and Shocking Video at 6!) are likely to disappear for two reasons. First, the rhythm of broadcast television scheduling is changing because of competition with cable. Cable introduces new shows and big movies throughout the year, rendering such concepts as "The Fall Season" and "Premiere Week" obsolete. Fox has long had year-round premieres, and NBC announced in 2008 that it would follow suit. CBS's *Survivor* and NBC's *Fear Factor* both debuted in summer, formerly network television's

MEDIA HISTORY REPEATS

Can't Find Them or They Aren't There? Where Have All the Boys and Minorities Gone?

Just as the radio networks questioned the ratings system they had long embraced when television began to erode their audiences, today's television networks are at war with Nielsen, blaming the ratings-taker for precipitous declines in viewers, especially young men and minorities. This echo of an older conflict is a bit different, however, because it involves not only the advent of new technology (cable, video games, the Internet) but the coming of a new way to take the ratings themselves, the personal peoplemeter.

Broadcasters and Nielsen feud often—whenever there are declines in viewership. Things got so bad in 1996 that the networks ran ads in industry magazines criticizing Nielsen and even sued their longtime partner. But Nielsen does try to meet industry needs. When cable began to carve up the audience, television executives said the sample of TV homes was too small. Nielsen tripled the number. When broadcasters complained that Nielsen's intentional bypass of homes with DVR technology led to undercounts of upscale viewers, the ratings company developed technology that allowed measurement of their nontraditional viewing. When advertisers wanted measurement of product placements inside shows in addition to that of traditional commercial spots, Nielsen developed technology to do that. Even the peoplemeter itself was a response to inadequacies in the original measurement technology. The **audimeter** counted only the time the set was turned on and off and the channel to which it was tuned. And the personal peoplemeter itself is a response to inadequacies of the flawed paper-and-pencil diaries (only a third of those distributed are ever completed; people fill them out days after watching; they are inadequate for reflecting channel surfing). So what can the broadcasters be complaining about now? They're losing viewers; that's not Nielsen's fault. In 2000 the major broadcast networks commanded 63% of all television viewing. Today their share is typically around 55%, dropping to as low as 30% in the summer (Becker, 2007).

What the broadcasters are complaining about is the decline in viewing of two very specific, and very valuable, sets of demographics—young men and minorities, especially Hispanic viewers. It's a measurement problem, claim the broadcasters. It's viewers abandoning your programming, responds Nielsen. Either way, as the Republican senator from Montana, Conrad Burns, argued when calling Senate Communications Subcommittee hearings on the peoplemeter in July 2004, "The public has a right to know that the rating system which defines the public airwaves is accurate and fair to all viewers" ("Breaking," 2004, p. 3).

"The peoplemeter has always been a time bomb waiting to explode for younger demographics. I consider it inevitable that younger demographics will be increasingly resistant to constantly pushing buttons to prove what they are viewing, just as they would be unwilling to make their beds or call their parents every half-hour, or otherwise adhere to rigid requirements."

The broadcasters assert that Nielsen does not attract sufficient numbers of minorities to its sample of viewers, a charge supported by at least one former Nielsen executive (McClellan, 2004). While middle-class White people know what it means to be "a Nielsen family," many minority people, especially Spanish-speaking immigrants, have no idea. They are also wary of all

programming graveyard. With the basic structure of the programming year disrupted, broadcasters can no longer afford to save their best or biggest programming for sweeps weeks. Second, the personal peoplemeter delivers detailed viewing and demographic data every day of the year, making the four-times-a-year, data-intensive ratings periods unnecessary.

A second, more important measure of television's audience is its *share,* which is a direct reflection of a particular show's competitive performance. Share doesn't measure viewers as a percentage of *all* television households (as do the ratings). Instead, the share measures a program audience as a percentage of the *television sets in use* at the time it airs. It tells us what proportion of the *actual* audience a program attracts, indicating how well a particular program is doing on its given night, in its time slot, against its competition (Figure 8.1). For example, *The Tonight Show with Jay Leno* normally gets a rating of around 4—terrible by prime-time standards—but because it's on when fewer homes are tuned in, its share of 15 (15% of the homes with sets in use) is very high.

data recording in these times of suspicion toward immigrants. Young men, according to the networks, are undercounted because they reject the regimen of button pushing and, more important, Nielsen's sample does not include sufficient numbers of "dependent young adults" (18- to 34-year-old men living at home).

Nielsen responds that the problem is not bad measurement, but measurement that is too good (Carter, 2003). Recent precipitous declines in both young men (15%) and minorities (22%) are real, and it is only because measurement has improved so much that they are now showing up. Young men are gravitating toward cable, DVD, the Internet, and video games, and Hispanic people are tuning in to Spanish-language cable offerings such as Univision.

What do you think? Are these steep declines in viewing a product of Nielsen's methods? Do you agree with Cox Broadcasting's CEO, Andy Fisher, who said, "The peoplemeter has always been a time bomb waiting to explode for younger demographics. I consider it inevitable that younger demographics will be increasingly resistant to constantly pushing buttons to prove what they are viewing, just as they would be unwilling to make their beds or call their parents every half-hour, or otherwise adhere to rigid requirements" (quoted in Greppi, 2003)? Or do you side with MTV's chief of research, Betsy Frank, who argues that today's "media actives" (viewers born after 1970) are disenchanted with broadcast television? These young people "are accustomed to having multiple entertainment options: videogames, cable and the Internet, as well as television. And now they are beginning to influence their older cohorts, creating 'the perfect TV storm'" (quoted in Romano, 2003, p. 6).

Are young male viewers undercounted in the ratings, or are they abandoning broadcast television for fare more suited to their tastes, such as MTV's *Viva La Bam?*

The Coming of Cable

Mahanoy City, Pennsylvania, appliance sales representative John Walson was having trouble selling televisions in 1948. The Pocono Mountains sat between his town and Philadelphia's three new stations. But Walson was also a powerline worker, so he convinced his bosses to let him run a wire from a tower he erected on New Boston Mountain to his store. As more and more people became aware of his system, he began wiring the homes of customers who bought his sets. In June of that year Walson had 727 subscribers for his **community antenna television (CATV)** system (Chin, 1978). Although no one calls it CATV anymore, cable television was born.

The cable Walson used was a twin-lead wire, much like the cord that connects a lamp to an outlet. To attract even more subscribers, he had to offer improved picture quality. He accomplished this by using *coaxial cable* and self-manufactured boosters (or amplifiers). Coaxial cable—copper-clad aluminum wire encased in plastic foam insulation, covered by an aluminum outer conductor, and then sheathed in plastic—had more bandwidth than did twin-lead wire. As a result, it allowed more of the original signal to

John Walson.

Ratings and shares can be computed using these formulas:

$$\text{Rating} = \frac{\text{Households tuned in to a given program}}{\text{All households with television}}$$

$$\text{Share} = \frac{\text{Households tuned in to a given program}}{\text{All households tuned in to television at that time}}$$

Here's an example. Your talk show is aired in a market that has 1 million television households; 400,000 are tuned in to you. Therefore,

$$\frac{400{,}000}{1{,}000{,}000} = .40, \text{ or a rating of } 40.$$

At the time your show airs, however, there are only 800,000 households using television. Therefore, your share of the available audience is

$$\text{Share} = \frac{400{,}000}{800{,}000} = .50, \text{ or a rating of } 50.$$

If you can explain why a specific program's share is always higher than its rating, then you understand the difference between the two.

Figure 8.1 Computing Ratings and Shares.

WWW

National Cable & Telecommunications Association
www.ncta.com

WWW

National Telecommunications and Information Administration
www.ntia.doc.gov

pass and even permitted Walson to carry a greater number of channels.

As Walson continued to expand his CATV business, Milton Jerrold Shapp, later to become Pennsylvania's governor, noticed thousands of antennas cluttering the roofs of department stores and apartment buildings. Seeing Walson's success, he set up master antennas and connected the sets in these buildings to them, employing a signal booster he had developed. This was the start of **master antenna television (MATV).**

With expanded bandwidth and the new, powerful Jerrold boosters, these systems began experimenting with the **importation of distant signals,** using wires not only to provide improved reception but also to offer a wider variety of programming. They began delivering independent stations from as far away as New York to fill their then-amazing 7 to 10 channels. By 1962, 800 systems were providing cable television to more than 850,000 homes.

The industry today is composed of 7,090 individual cable systems serving 65.1 million homes subscribing to basic cable (58% of all television households). Seventy-seven percent of these cable households, or 45% of all U.S. television homes, receive premium cable. The industry generates revenues of $74.7 billion, with $26.9 billion of that amount earned through advertising (NCTA, 2008).

Television and Its Audiences

The 1960s saw some refinement in the technical structure of television, which influenced its organization and audience. In 1962 Congress passed **all-channel legislation,** which required that all sets imported into or manufactured in the United States be equipped with both VHF and UHF receivers. This had little immediate impact; U.S. viewers were now hooked on the three national networks and their VHF affiliates. Still, UHF independents and educational stations were able to at least attract some semblance of an audience. The UHF independents would have to wait for the coming of cable to give them clout. Now that the educational stations were attracting more viewers, they began to look less educational in the strictest sense of the word and began programming more entertaining cultural fare (see the essay "The Creation of *Sesame Street*" on p. 217). The Public Broadcasting Act of 1967 united the educational stations into an important network, the Public Broadcasting Service (PBS), which today has nearly 400 member stations.

The 1960s also witnessed the immense social and political power of the new medium to force profound alterations in the country's consciousness and behavior. Particularly influential were the Nixon–Kennedy campaign debates of 1960, broadcasts of the aftermath of Kennedy's assassination and funeral in 1963, the 1969 transmission of Neil Armstrong's walk on the moon, and the use of television at the end of the decade by civil rights and anti–Vietnam War leaders.

The 1960s also gave rise to a descriptive expression often used today when television is discussed. Speaking to the 1961 convention of the National Association of Broadcasters, John F. Kennedy's new FCC chair, Newton Minow, invited broadcasters to

> sit down in front of your television set when your station goes on the air and stay there without a book, magazine, newspaper, profit and loss sheet, or ratings book to distract you, and keep your eyes glued to that set until the station signs off. I can assure you that you will observe a **vast wasteland.**

The Creation of *Sesame Street*

In 1968 a public affairs program producer for Channel 13 in New York City identified a number of related problems that she believed could be addressed by a well-conceived, well-produced television show.

Joan Ganz Cooney saw that 80% of 3- and 4-year-olds and 25% of 5-year-olds in the United States did not attend any form of preschool. Children from financially disadvantaged homes were far less likely to attend preschool at these ages than their better-off peers. Children in these age groups who did go to preschool received little academic instruction; preschool was the equivalent of organized recess. Large numbers of U.S. children, then, entered first grade with no formal schooling, even though education experts had long argued that preschool years were crucial in children's intellectual and academic development. In addition, the disparity in academic preparedness between poor and other children was a national disgrace.

Did Cooney and her show make a difference? Several national studies demonstrated that academic performance in early grades was directly and strongly correlated with regular viewing of Sesame Street.

What did these children do instead of going to preschool? Cooney knew that they watched television. But she also knew that "existing shows for 3- through 5-year-old children . . . did not have education as a primary goal" (Ball & Bogatz, 1970, p. 2). Her idea was to use an interesting, exciting, visually and aurally stimulating television show as an explicitly educational tool "to promote the intellectual and cultural growth of preschoolers, particularly disadvantaged preschoolers" and to "teach children how to think as well as what to think" (Cook et al., 1975, p. 7).

Cooney established a nonprofit organization, the Children's Television Workshop (CTW), and sought funding for her program. Several federal agencies, primarily the Office of Education, a number of private foundations including Carnegie and Ford, and public broadcasters contributed $13.7 million for CTW's first 4 years.

After much research into producing a quality children's television show and studying the best instructional methods for teaching preschool audiences, CTW unveiled *Sesame Street* during the 1969 television season. It was an instant hit with children and parents. The *New Republic* said, "Judged by the standards of most other programs for preschoolers, it is imaginative, tasteful, and witty" (cited in Ball & Bogatz, 1970, p. 3). *Reader's Digest* said, "The zooming popularity of *Sesame Street* has created a sensation in U.S. television" (p. 3). *Saturday Review* gave its "Television Award" to *Sesame Street* "for the successful illustration of the principle that a major allocation of financial resources, educational research and creative talent can produce a widely viewed and popular series of regular programs for preschool children with an immediate payoff in cognitive learning" (p. 4). Originally scheduled for 1 hour a day during the school week, within months of its debut *Sesame Street* was being programmed twice a day on many public television stations, and many ran the entire week's schedule on Saturdays and Sundays. Today, more than 35 years after its debut, *Sesame Street* still airs 26 new episodes a year (Gillies, 2004).

Did Cooney and her show make a difference? Several national studies demonstrated that academic performance in early grades was directly and strongly correlated with regular viewing of *Sesame Street.* The commercial networks began to introduce educational fare into their Saturday morning schedules. ABC's *Grammar Rock, America Rock* (on U.S. history), and *Multiplication Rock* were critical and educational successes at the time, and a traditional children's favorite, CBS's *Captain Kangaroo,* started airing short films influenced by *Sesame Street* on a wide variety of social and personal skills. *Sesame Street* went international and appears even today in almost every developed nation in the world.

The "*Sesame Street* effect" resonates even today. It is composed of solid research into how preschool kids learn from television (for example, watch the action on a good children's show; it typically moves left to right across the screen—research shows that this promotes literacy because this is how we read, left to right across the page), interactivity, high production values, catchy music, and a diverse group of characters. It marks the "modern wave" of kids' TV—PBS's *Super Why!*, Nickelodeon's *Blue's Clues* and *Dora the Explorer*, Disney's *Handy Manny* and *Little Einsteins*, and Discovery's *Hip Hop Harry* (Goetzl, 2007).

The *Sesame Street* gang.

WWW
Cable and Telecommunications Association for Marketing
www.ctam.com

WWW
National Association of Broadcasters
www.nab.org

Whether or not one agrees with Minow's assessment of television, then or now, there is no doubt that audiences continue to watch:

- There are 112.3 million television households in the United States; the average home has more television sets (2.73) than people (2.55; Average, 2006).
- A television is on for an average of 8 hours 11 minutes a day in each U.S. household.
- The average male watches 4 hours 31 minutes a day; the average female 5 hours 17 minutes; and the average child, 4 hours 32 minutes.
- Television reaches more adults every day (89.9%) than any other medium; adults spend more time each day (264.8 minutes) with television than they do with any other medium; and, television fills 53.2% of the total daily media diet for adults 25 to 54 years old (all statistics from www.tvb.org).

There can be no doubt, either, that television is successful as an advertising medium:

- Total 2006 billings for television were $75.7 billion, with approximately 64% generated by broadcast and 36% by cable television. Together they collected 43.7% of all U.S. ad spending (Johnson & Brown, 2007).
- The average 30-second prime-time network television spot costs $100,000 (spots on demographically attractive *Greys Anatomy* average $419,000, and *American Idol* spots have gone as high as $705,000).
- Average ad time on the 2008 Super Bowl Giants–Patriots broadcast cost $2.7 million for 30 seconds.
- Eight-two percent of American consumers see television as the most influential ad medium; 67%, the most persuasive; 51%, the most authoritative; and 77%, the most exciting.
- A 30-second local spot can fetch up to $30,000 on a top-rated special in a major market (all statistics from www.tvb.org).

Scope and Nature of the Broadcast Television Industry

WWW
ABC
www.abc.com

Today, as it has been from the beginning, the business of broadcast television is dominated by a few centralized production, distribution, and decision-making organizations. These **networks** link affiliates for the purpose of delivering and selling viewers to advertisers. The large majority of the 1,379 commercial stations in the United States are affiliated with a national broadcasting network: ABC, NBC, and CBS each have over 200 affiliates and Fox has close to that number. Many more stations are affiliated with the CW and My Network TV, often referred to as "weblets." Although cable has introduced us to dozens of new cable networks—ESPN, MTV, Comedy Central, and A&E, to name a few—most programs that come to mind when we think of television were either conceived, approved, funded, produced, or distributed by the broadcast networks.

WWW
NBC
www.nbc.com

Local affiliates carry network programs (they **clear time**) in exchange for direct payments for airing a program (called **compensation**) and the right to keep all income from the sale of commercial time in that program to local advertisers. Both compensation and local spot time are negotiated with affiliates on a station-by-station basis, and because the networks have been losing audience, both offerings have been considerably scaled back. In fact, many affiliates receive no compensation at all or are even asked to underwrite the production of some content.

The Networks and Program Content

WWW
Episodes of TV Shows
www.epguides.com

Networks control what appears on the vast majority of local television stations, but they also control what appears on non-network television, that is, when affiliates program their own content. In addition, they influence what appears on independent stations and on

cable channels. This non-network material not only tends to be network-*type* programming but most often is programming that originally aired on the networks themselves (called **off-network** programs).

Why do network and network-type content dominate television? *Availability* is one factor. There is 65 years' worth of already successful network content available for airing on local stations. A second factor is that the *production and distribution* mechanisms that have long served the broadcast networks are well established and serve the newer outlets just as well as they did NBC, CBS, and ABC. The final reason is us, the audience. The formats we are most comfortable with—our television tastes and expectations—have been and continue to be developed on the networks.

WWW

CBS
www.cbs.com

How a Program Gets on the Air

The national broadcast networks look at about 4,000 proposals a year for new television series. Many, if not most, are submitted at the networks' invitation or instigation. Of the 4,000, about 120 will be filmed as **pilots,** or trial programs. Perhaps 20 to 30 will make it onto the air. Only 12 of these (1 in 10) will last a full broadcast season. In a particularly good year, at most 3 or 4 will succeed well enough to be called hits. The networks spent $500 million in 2007 to suffer this process (Bednarski, 2008). For this reason, they prefer to see ideas from producers with established track records and financial and organizational stability—for example, David E. Kelley is the source of *L.A. Law, Picket Fences, Ally McBeal, Boston Public, Chicago Hope, The Practice, Boston Legal, Life on Mars, The Wedding Belles,* and *Doogie Howser, M.D.* Jerry Bruckheimer produced 14 prime-time series from 2005 to 2007 alone, including *Cold Case, Close to Home,* and all three versions of *CSI.*

WWW

Children's Television Workshop
www.sesameworkshop.org

For more information on a particularly popular program, watch "TV Phenom—*American Idol*" on the book's Online Learning Center Web site.

The way a program typically makes it onto the air differs somewhat for those who have been asked to submit an idea and for producers who bring their concepts to the networks. First, a producer has an *idea;* or a network has an idea and asks a proven producer to propose a show based on it (possibly offering a **put,** a deal that guarantees the producer that the network will order at least a pilot or it has to pay a hefty penalty). The producer must then *shop* the idea to one of the networks; naturally, an invited producer submits the proposal only to the network that asked for it. In either case, if the network is persuaded, it *buys the option* and asks for a written *outline* in which the original idea is refined. If still interested, the network will order a full *script.*

If the network approves that script, it will order the production of a pilot. Pilots are then subjected to rigorous testing by the networks' own and independent audience research organizations. Based on this research, networks will often demand changes, such as writing out characters who tested poorly or beefing up story lines that test audiences particularly liked.

If the network is still interested, that is, if it believes that the show will be a hit, it orders a set number of episodes and schedules the show. In television's early days, an order might be for 26 or 39 episodes. Today, however, because of escalating production costs, the convention is at first to order 6 episodes. If these are successful, a second order of 9 more is placed. Then, if the show is still doing well, a final 9 episodes (referred to as *the back nine*) will be commissioned. Few shows make it that far. For example, during the 2005–2006 season, 61 new shows were canceled before they had aired even 10 times (Farhi, 2006).

The reason television program producers participate in this expensive enterprise is that they can make vast amounts of money in syndication, the sale of their programs to stations on a market-by-market basis. Even though the networks control the process from idea to scheduling and decide how long a show stays in their lineups, producers continue to own the rights to their programs. Once enough episodes are made (generally about 50, which is the product of 4 years on a network), producers can sell the syndicated package to the highest bidder in each of the 210 U.S. television markets, keeping all the revenues for themselves. This is the legacy of Lucille Ball's business genius. The price of a syndicated program depends on the market size, the level of competition between the stations in the market, and the age and popularity of the program itself. The station buys the right to a

Two of syndication's biggest winners, urbane, off-network hits *Frasier* and *Friends*.

specified number of plays, or airings. After that, the rights return to the producer to be sold again and again. A program that has survived at least 4 years on one of the networks has proven its popularity, has attracted a following, and has accumulated enough individual episodes so that local stations can offer weeks of daily scheduling without too many reruns. The program is a moneymaker. Paramount has already earned more than $2 billion from its syndication of *Frasier,* and Warner Brothers, already collecting more than $4.3 million an episode from its syndication of *Friends,* predicts it will make $3 billion before audiences lose interest (Albiniak, 2004).

So attractive is syndication's income potential, especially when coupled with the promise of profits from digital downloads and sales of DVD collections of television shows, that the networks themselves have become their own producers (and therefore syndicators). CBS Paramount, for example, produces 95% of the programming for its two networks, CBS and the CW; Universal produces 92% of the prime-time fare for its network, NBC (Benson, 2007).

Dr. Phil is among the more successful first-run syndicated programs.

It is important to note that there is another form of syndicated programming. **First-run syndication** is programming produced specifically for sale into syndication on a market-by-market basis. It is attractive to producers because they don't have to run the gauntlet of the network programming process and they keep 100% of the income.

Satellites have improved the distribution process for first-run syndicated series, increasing the number and variety of available programs. Game and talk shows, staples of the business in the past, have proliferated and been joined by programs such as *Judge Judy* and *Judge Joe Brown,* court shows distributed daily by satellite to hundreds of stations. They are inexpensive to make, inexpensive to distribute, and easily **stripped** (broadcast at the same time 5 nights a week). They allow an inexhaustible number of episodes with no repeats and are easy to promote ("Watch the case of the peeping landlord. Tune in at 5:30").

In whatever form, the process by which programs come to our screens is changing because the central position of networks in that process has been altered. In 1978 ABC, CBS, and NBC drew 92% of all prime-time viewers. In 1988 they collected 70%. In 2002 their share fell "to an historic low: 47%. Not only is it a record low, but it's the first time the four-network share has dropped below 50%, a

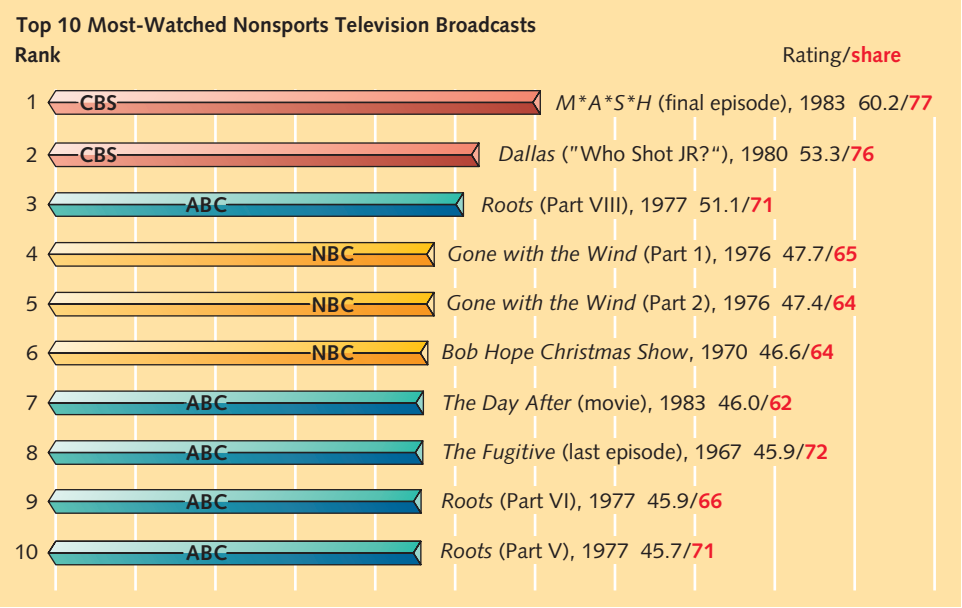


Figure 8.2 Top 10 Most-Watched Nonsports Television Broadcasts. *Source:* Television Bureau of Advertising (www.tvb.org).

benchmark broadcasters dreaded to fall beneath" (McClellan, 2002, p. 6). In fact, the much-anticipated *Friends* finale had a rating of just under 30, not even coming close to being one of the most-watched programs (Figure 8.2). New technologies—cable, VCR, DVD, digital video recorders, satellite, the Internet and digitization, and even the remote control—have upset the long-standing relationship between medium and audience. Convergence is also reshaping that relationship.

Cable and Satellite Television

John Walson's brainchild reshaped the face of modern television. During cable's infancy, many over-the-air broadcasters saw it as something of a friend. It extended their reach, boosting both audience size and profits. Then, in November 1972, Sterling Manhattan Cable launched a new channel called Home Box Office. Only a handful of homes caught the debut of what we now call HBO, but broadcasters' mild concern over this development turned to outright antagonism toward cable in 1975, when new HBO owner Time Inc. began distributing the movie channel by satellite. Now **premium cable** was eating into the broadcasters' audience by offering high-quality, nationally produced and distributed content. The public enthusiastically embraced cable and that, coupled with the widespread diffusion of **fiber optic** cable (the transmission of signals by light beam over glass, permitting the delivery of hundreds of channels), brought the medium to maturity.

The national distribution by satellite of HBO in 1975 changed cable television, all television in fact, for all time.

Programming

We've already seen that cable's share of the prime-time audience exceeded that of the Big Four broadcast networks for the first time in 2001. Its total audience share has exceeded that of ABC, CBS, NBC, and Fox every year since. What attracts these viewers is programming, a fact highlighted by the tens of millions of viewers who tuned in to cable network CNN as the drama of the terrorist attacks unfolded on September 11, 2001, and the 45% of all Americans who turned first to cable news, rather than other media, for information on the 2003 war with Iraq ("Getting," 2003). But news is not cable's only programming success. Even home-shopping channels such as QVC (2006 revenues of $7.1 billion, exceeding that of traditional networks ABC and NBC) have made their mark.

As we've seen, cable operators attract viewers through a combination of basic and premium channels, as well as with some programming of local origin. There are about

WWW

Fox
www.fox.com

Revenues of cable shopping network QVC exceed those of traditional television networks ABC and NBC.

WWW

Women in Cable & Telecommunications
www.wict.org

400 national cable networks and 90 regional cable networks. We all know national networks such as CNN, Lifetime, HBO, and the History Channel. Regional network North-West Cable News serves Washington, Oregon, Idaho, Montana, northern California, and parts of Alaska; New England Cable News serves the states that give it its name; and several regional sports-oriented channels serve different parts of the country. The financial support and targeted audiences for these program providers differ, as does their place on a system's **tiers,** groupings of channels made available to subscribers at varying prices.

Basic Cable Programming In recognition of the growing dependence of the public on cable delivery of broadcast service as cable penetration increased, Congress passed the Cable Television Consumer Protection and Competition Act of 1992. This law requires operators to offer a truly basic service composed of the broadcast stations in their area and their access channels. Cable operators also offer another form of basic service, **expanded basic cable,** composed primarily of local broadcast stations and services with broad appeal such as TBS, TNT, the USA Network, and Comedy Central. These networks offer a wide array a wide array of programming not unlike that found on the traditional, over-the-air broadcast networks. The 20 cable networks with the largest number of subscribers appear in Figure 8.3. All rank in the top 20, not necessarily because they are the most

Controversial cable programming like *Nip/Tuck* helps fuel the à la carte pricing debate.

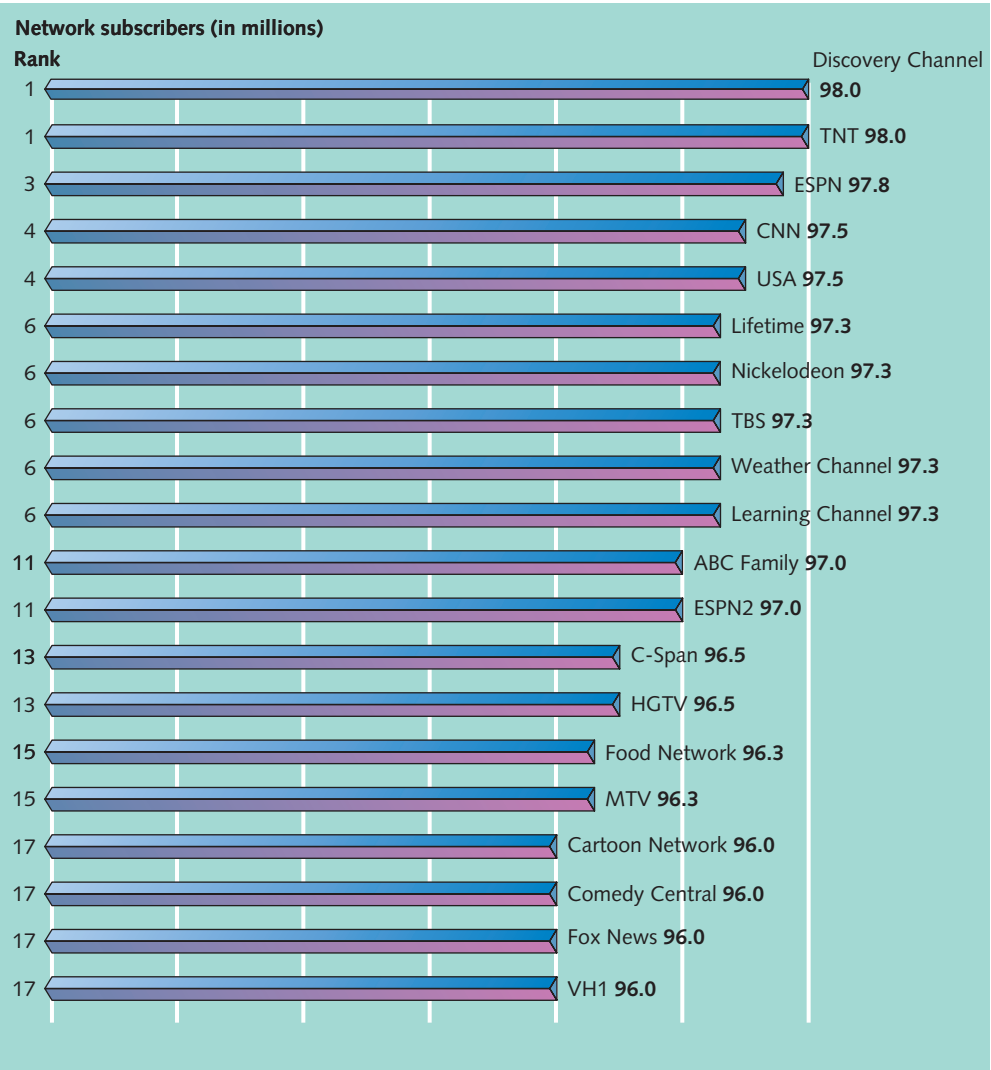


Figure 8.3 Top 20 Cable Networks, 2008. *Source:* NCTA, 2008.

watched, but because they all sit on cable's basic tiers. Naturally, that is the place to be because advertisers covet those large potential audiences. This is the dispute, for example, at the heart of the NFL Network's long-running fight with the nation's cable operators. Most operators want to put the network on a for-pay tier. NFL Network wants placement on basic cable. You may remember the November 2007 prime-time Giants–Patriots football game. In an effort to embarrass the cable industry, NFL Network, which had exclusive rights to this highly anticipated match-up, provided it for free to broadcast networks CBS and NBC, hoping to show fans what their local operators were denying them.

Because of concentration, operators are increasingly choosing to carry a specific basic channel because their owners (who have a financial stake in that channel) insist that they do. **Multiple system operators (MSOs)** are companies that own several cable franchises. Time Warner, Liberty, and Cablevision own Court TV. Comcast has an interest in numerous prime channels. Viacom owns BET. Naturally, these networks are more likely to be carried by systems controlled by the MSOs that own them and less likely to be carried by other systems. This pattern also holds true for MSO-owned premium channels such as HBO and Showtime.

The long-standard concept of different pricing for different packages or tiers of channels is currently under attack by the FCC and some members of Congress. Concerns over viewers' accidental access to unwanted, offensive content (FX's *Nip/Tuck* is a particular target of complaint) and rising cable prices (up 50% since 1996) are leading to calls for **à la carte pricing**—that is, paying for cable on a channel-by-channel basis. The industry

This November 2007 game pitted the Patriots against the Giants and NFL Network against the MSOs.

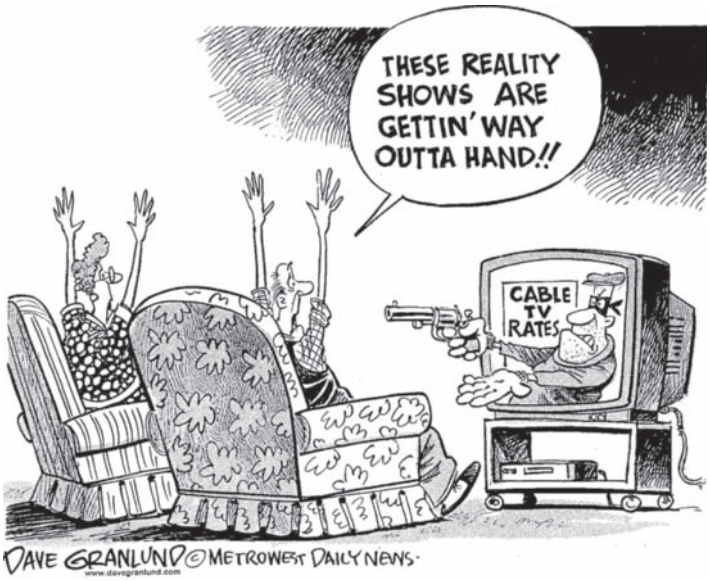
argues that à la carte would have precisely the opposite effect desired by its advocates—costs would not be reduced and many favorite, or "safe," channels would disappear. Glenn Britt, Time Warner Cable CEO, explains, "We carry many channels that appeal just to niche groups and minorities. It's by no means clear that those could survive. . . . Cable isn't about having a few channels that appeal to everybody; it's about having a lot of channels that appeal to everybody. You may not watch C-Span every night, but it's good to know it's there" (in Graves, 2004, p. 88).

Premium Cable As the FCC lifted restrictions on cable's freedom to import distant signals and to show current movies, HBO grew and was joined by a host of other satellite-delivered pay networks. Today, the most familiar and popular premium cable networks are HBO, Showtime, the Spice Channel, the Sundance Channel, and Cinemax.

In addition to freedom from regulatory constraint, two important programming discoveries ensured the success of the new premium channels. After television's early experiments with over-the-air **subscription TV** failed, many experts believed people simply would not pay for television. So the first crucial discovery was that viewers would indeed pay for packages of contemporary, premium movies. These movie packages could be sold less expensively than could films bought one at a time, and viewers were willing to be billed on a monthly basis for the whole package rather than pay for each viewing.

The second realization boosting the fortunes of the premium networks was the discovery that viewers not only did not mind repeats (as many did with over-the-air television) but welcomed them as a benefit of paying for the provider's slate of films. Premium channel owners were delighted. Replaying content reduced their programming costs and solved the problem of how to fill all those hours of operation.

Premium services come in two forms: movie channels (HBO, Starz!, and Encore, for example) that offer packages of new and old movies along with big sports and other special events—all available for one monthly fee—and pay-per-view channels, through which viewers choose from a menu of offerings (almost always of very new movies and very big sporting events) and pay a fee for the chosen viewing.



Rising cable rates are at the heart of the growth of DBS.
Dave Granlund, Metrowest Daily News.

People enjoy premium channels in the home for their ability to present unedited and uninterrupted movies and other content not usually found on broadcast channels—for example, adult fare and championship boxing and wrestling. Increasingly, however, that "content not usually found on broadcast channels" consists not of movies and sports but high-quality serial programming—content unencumbered by the need to attract the largest possible audience possessing a specific set of demographics. Premium cable series such as *The Sopranos, Big Love, The Wire, In Treatment, Queer as Folk, The L Word, Weeds,* and *Rome* attract large and loyal followings.

The other dominant multichannel service is direct broadcast satellite (DBS). First available to the public in 1994, it has brought cable's subscriber growth to a near standstill. The early slow diffusion of DBS was the product of efforts by the cable industry to use its financial might (and therefore congressional lobbying power) to thwart the medium. For example, federally mandated limitations on the importation by DBS of local over-the-air television stations were finally eliminated in 1999 with the passage of the Satellite Home Viewers Improvement Act. Still, from the viewer's perspective, what is on a DBS-supplied screen differs little from what is on a cable-supplied screen.

Viewers and critics agree that much of television's most sophisticated (and enjoyable) programming is available on premium cable. Unafraid of offending advertisers, cable networks can present challenging, often controversial content. Can you match the title with the image? *Weeds, Entourage, The L Word, The Sopranos, In Treatment, The Tudors.*

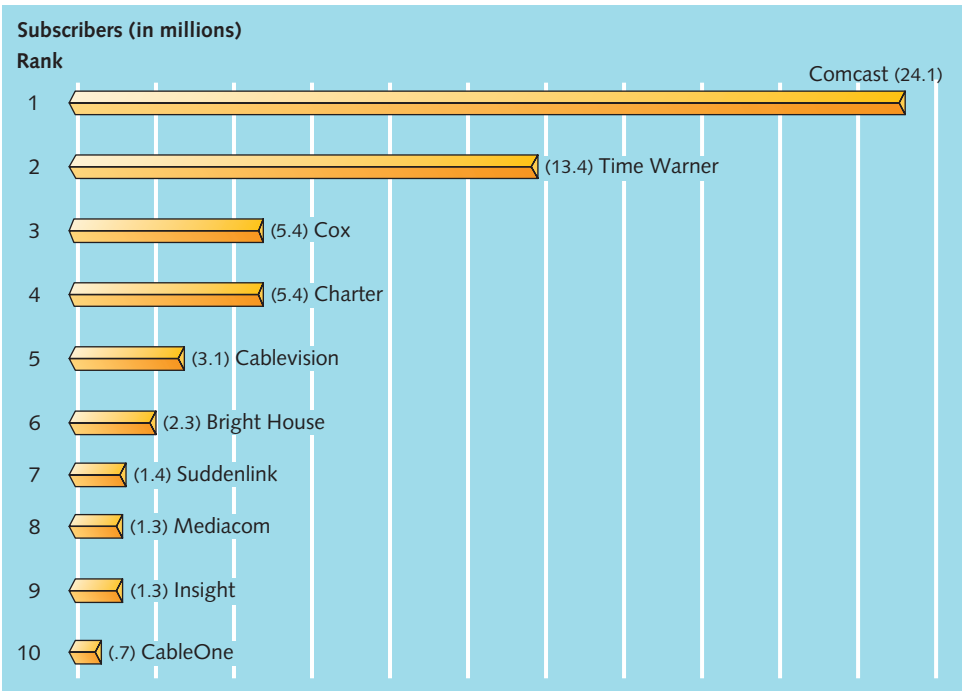


Figure 8.4 Top 10 Cable MSOs, 2008. *Source:* NCTA, 2008.

WWW

DirecTV
www.directv.com

DBS in the United States is, for now, dominated by two companies, DirecTV, owned by Rupert Murdoch's News Corporation, and Dish Network (owned by EchoStar, a publicly traded company). DirecTV has 16.6 million subscribers; Dish Network, 13.7 million. And these two companies, along with satellite start-up VOOM (owned by cable MSO Cablevision), have recently been taking subscribers away from cable at a furious pace. Now that satellite homes in most of the country can receive local stations, it is cable's ever-increasing monthly rates that are at the heart of the switch to DBS. Look at the list of the 10 largest cable MSOs in Figure 8.4. Note that if Dish and DirecTV were added to the list, they would be the country's second and third largest MSOs.

Trends and Convergence in Television and Cable

The long-standing relationship between television and its audiences is being redefined. Nielsen's chief technology officer, Bob Luff, explains, "Radio is going on the Web, TV is going on cellphones, the Web is going on TV, and everything, it seems, is moving to video-on-demand and quite possibly the iPod and PlayStation Portable. Television and media will change more in the next three to five years than they've changed in the past 50" (in Gertner, 2005, p. 34). This profound change, initially wrought by cable and satellite, has been and is being driven by other new technologies as well—VCR, DVD, DVR, the Internet, digitization, and even the cell phone.

VCR

Introduced commercially in 1976, videocassette recorders (VCRs) quickly became common in American homes, but are now slowly disappearing as newer video technologies that give people even more control over viewing choices have emerged. Still, their introduction further eroded the audience for traditional over-the-air television, as people could now watch rented and purchased videos. VCR also allowed **time-shifting,** taping a show for later viewing, and **zipping,** fast-forwarding through taped commercials. As a result, people became comfortable with, in fact came to expect, more control over when, what, and how they watched television.

DVD

In March 1996 **digital video disc (DVD)** went on sale in U.S. stores. Using a DVD player that looks much like a VCR machine, viewers can stop images with no loss of fidelity; can subtitle a movie in a number of languages; can search for specific scenes from an on-screen picture menu; and can access information tracks that give background on the movie, its production, and its personnel. Scenes and music not used in the theatrical release of a movie are often included on the disc.

Innovations such as these have made DVD the fastest-growing consumer electronic product of all time. Sales of DVD players exceeded those of VCRs for the first time in September 2001. Machines now sit in most U.S. homes, and disc sales exceed $22.9 billion a year (Garrett, 2008). In June 2002, Circuit City, America's second-largest electronic chain, and Borders announced that they were dropping sales of videotapes in favor of exclusive sales of DVDs. We are not likely to see the complete elimination of the VHS machine any time soon, however, because recordable DVD, while available, is still quite expensive, especially for those who already possess tape machines that can record.

WWW
Dish Network
www.dishnetwork.com

DVR

In March 1999 Philips Electronics unveiled its version of the **digital video recorder (DVR),** TiVo, and soon after, Replay Networks introduced its ReplayTV. Both contain digital software that puts a significant amount of control over content in viewers' hands. What can viewers do with DVR? They can "rewind" and play back portions of a program while they are watching and recording it without losing any of that show. They can digitally record programs by simply telling the system their titles. By designating their favorite shows, viewers can instruct DVR to automatically record and deliver not only those programs but all similar content over a specified period of time. This application can even be used with the name of a favorite actor. Punch in Adam Sandler, and DVR will automatically record all programming in which he appears.

WWW
TiVo
www.tivo.com

DVR does not deliver programming the way broadcasters, cablecasters, and DBS systems do. Rather, it is employed *in addition to* these content providers. To use either ReplayTV or TiVo, viewers must buy a special receiver, and TiVo requires a monthly service charge. Today, about 23% of all TV households have DVR, and industry predictions are that the proportion will swell to 40% by 2011; other estimates are as high as 50% (Guthrie, 2007; Mello, 2007). DVR penetration was initially slowed by the cost of the equipment and its requirement that users connect it to a phone line. But all DBS providers and almost every MSO now offer low-cost DVR as part of their technology platform, helping overcome the cost and phone jack problems, and TiVo's point-and-click Internet download technology, in development, may be sufficient incentive for some people who might not otherwise utilize DVR to do so. Still, as with DVD, DVR's mere presence is additional evidence that television viewing, as we have long known and practiced it, is changing dramatically.

WWW
ReplayTV
www.replay.com

Digital Television

Digitization of video signals reduces their size; therefore, more information can be carried over telephone wires (belonging to either a cable or phone company) and stored. The traditional television broadcasters see digitization of television signals as their salvation, because it would allow them to carry multiple forms of content on the spectrum space currently used to carry their one broadcast signal. But digitization for the purpose of transmitting multiple signals conflicts with the use of their spectrum space to transmit high-definition digital television (HDTV). This puts broadcasters in a bind, because viewers want beautiful, clear, wide-screen, high-definition images, but they also want a lot of channels of video and other data. If broadcasters opt to devote their entire spectrum space, as technologically required, to the transmission of high-definition images, they will lose audience share to cable, the Internet, and DBS, all of which offer multiple channels of programming and data. If they opt to use digitization to divide their channels (called

multiplexing) and in effect become minicable companies themselves, offering over-the-air services such as clearer digital video images (although not of HDTV quality), Internet access, paging services, and constant data flow of information such as stocks and sports scores, they will lose HDTV set owners who want the even-crisper images of DVD.

The digital television revolution progressed slowly for two primary reasons. First is the lack of availability of digital receivers. Even though many of today's sets are sold as *digital,* this refers to how the set itself constructs the image; they do not have digital tuners—they do not allow viewers to access local over-the-air digital stations. This problem should be overcome by the FCC's August 2002 ruling that by 2007, all receivers imported into or made in the United States had to come equipped with digital tuners.

The second problem in the diffusion of digital television is that cable operators, too, must be willing to change over to digital. It does broadcasters who have made the expensive conversion to digital no good if cable operators cannot or will not devote valuable channels to digital signals. Some small steps have been made to resolve this difficulty. Although the over-the-air broadcasters have long lobbied the FCC to pass federal **digital must-carry rules** requiring cable operators to carry all digital, as well as analog, channels, some cable operators are making the move voluntarily. These obstacles notwithstanding, Congress has require all television stations to convert completely to digital transmission by February 2009.

Television on the Internet

Television on the Internet was slow to take off because of copyright and piracy concerns, and because few viewers had sufficient **bandwidth,** space on the wires bringing content into people's homes. So for several years the most typical video fare on the Net was a variety of short specialty transmissions such as movie trailers, short independent films, music videos, and news clips. But the development of increasingly sophisticated video compression software and the parallel rise of homes with **broadband** Internet connections (50% of home Internet users; Horrigan & Smith, 2007) have changed that. Because broadband offers greater information-carrying capacity (that is, it increases bandwidth), television on the Internet is increasingly common, a situation heralded by the 2006 announcements by the three major broadcast networks that they would join providers such as ifilm.com, youtube.com, and atomfilms.com in the download revolution. Each is trying its own model—rent a download for a short time, buy a download without commercials for a higher fee than one with ads, monthly subscriptions for limitless downloads—as the search for the right formula unfolds. The Internet companies, too, have joined in. Apple iTunes (apple.com/itunes) sells complete downloads of programs such as *Lost* and *Desperate Housewives* for $2 each, playable on full-size computers and even on video iPods. Google Video offers new (for example, *CSI*) and old (for example, *The Brady Bunch*) programs ranging in price from free to $4. AOL has In2TV (video.aol.com) offering free downloads of classic shows like *Growing Pains* with commercials, and Yahoo! (video.yahoo.com) provides free downloads of a few contemporary programs, such as *How I Met Your Mother*. Computer hardware manufacturer Intel's chief operating officer, Paul Otellini, proclaimed, "It's clear that the dam has broken. There's an inevitable move to use the Internet as a distribution medium and that's not going to stop" (in Markoff, 2006, p. G5).

Program owners view the Internet as easy money, as it costs very little to transfer programming to new platforms. Syndicators, both off-network and first-run, will be especially well served by the Internet. The broadcast networks, too, welcome the additional revenue stream provided by video downloads. They see the vast majority of viewers content to watch programming when they, the networks, schedule it. In fact, 95% of all U.S. television viewing occurs in real-time, that is, when it is scheduled by the broadcaster or cablecaster (Mello, 2007). But that is traditional television. So much more of what we view on the Net, however, is better referred to as video. What, for example, would you call 2-minute episodes of *Afterworld* created for cell phones and viewed on YouTube? You certainly wouldn't call it *television*.

Possum Death Spree is a hit for AtomFilms.com.

Video on the Internet

Sixty-two percent of Internet users report watching online video (Advertising.com, 2007). And while 65% of online viewers do indeed watch content originating from broadcast and cable networks, 39% also watch Web-only video, a percentage that grows to 46% for 18- to 24-year-olds (Hau, 2007). *Afterworld* isn't the only popular online video series. *Roommates,* which follows a group of attractive recent college grads around the world, appears on MySpace TV. *Quarterlife,* about the angst of being in one's 20s, also runs on MySpace TV in 6- to 8-minute episodes. It was so popular that it migrated to NBC in 2008 as a 1-hour weekly prime-time series.

None of these series would have been possible without the phenomenal success of YouTube. Attracting as few as 600,000 unique visitors in October 2005, it now draws nearly 50 million unique visitors every month, as many as 130 million counting repeat visitors (Daurat, 2007; Fritz & Learmonth, 2007). These viewers are drawn primarily by user-generated video. The site receives more than 80,000 video uploads every day, and it daily streams more than 100 million videos to viewers (Garfield, 2006). Other popular video-sharing sites are MSN Video, Google Video, and Yahoo! Video. All are experimenting with different ways of making money. All either sell ads on the screen surrounding the video image or play a commercial before or after the chosen video runs. YouTube has become so successful an advertising medium that it has begun paying for some user-generated video. Other video sites will surely follow (Benderoff, 2007). Revver.com, for example, evenly splits the income it earns from the commercials it embeds in user-uploaded videos.

AtomFilms.com, an online video pioneer on the Web since 1988, presents even another model. It offers user-generated uploads and original Web series (*Possum Death Spree* is a fan favorite). Because it has licensing deals with several cell phone providers and cable and Web outfits like Comedy Central and Spike TV, it gives users, in its own words, "a pipeline to the big time," paying significant sums for material that garners big audiences. AtomFilms will even occasionally sign its uploaders to development deals to expand the commercial quality and reach of their videos. Among its most notable alumni is Jason Reitman, who directed *Thank You for Smoking* and *Juno,* the latter earning him an Oscar nomination for best director in 2008. There will be much more on Internet video in Chapter 10.

CULTURAL FORUM

Brand X: Controlling the Flow of Information

The battle for control of the broadband wires that enter our homes has been raging in government, legal, and technology circles for years, and it hinges on the definition of the services provided by cable companies. The cable industry views itself as an **information service,** a legal designation that allows it, like a broadcast network, to maintain control over what passes over its lines. As an information service, an MSO can limit, grant access, and charge whatever it wishes to whomever it wishes. But many public interest groups and the Internet industries, especially the ISPs, want cable classified as a **telecommunications service,** making it a **common carrier,** like a phone company, required to carry the messages of all comers and with little power to restrict them.

This debate, "an important test of the First Amendment in the age of the Internet," according to the Media Access Project and the Center for Digital Democracy (Schwartzman, 2004, p. 1), was very much unnoticed by the larger public. Inevitably, it was left to the Supreme Court, in its June 2005 *National Cable & Telecommunications Association v. Brand X* decision, to clarify the issue and put it squarely in the cultural forum. In the 6–3 ruling, commonly referred to as the *Brand X* decision (after the small California-based ISP that locked horns with the NCTA), the Court ruled that cable was indeed an information service, free to control access to its broadband lines. For advocates of the opposing model, this news was doubly bad, because big phone companies like Verizon and the BOCs immediately announced their intention to seek similar status from the FCC; after all, they argued, they, too, were no longer "just" phone companies; they were providers of a multiple array of information services such as VOD and the Internet.

What is at stake in *Brand X*? The very "future of the Internet as we know it . . . the right of citizens to send and receive any content," and as such, say its critics, the practice of democracy itself (Schwartzman, 2004, p. 1). Allowing the "cozy duopoly," in the words of Consumers Union and the Consumer Federation of America, to control the flow of information into our homes "hands them the key" to limiting choice and competition in Internet services (Hansell, 2005). It gives them the power to channel their customers to one or a few ISPs (predictably their own, as most cable systems already do), deny users access to competing, possibly less expensive or more efficient service providers (using a subcontractor to provide Internet telephony, for example, rather than offering the more established independent company Vonage), and shut out "disfavored" content providers, as has happened several times recently. In two well-publicized incidents in 2007 alone, AT&T deleted anti–Bush administration lyrics from a Pear Jam live Internet broadcast and Comcast blocked some users' legal P2P video file-sharing to conserve bandwith for other uses. It could also stifle Internet innovation.

What is at stake in this decision? Critics say the very future of an open and free internet and the practice of democracy itself are threatened. "Allowing the 'cozy duopoly' of the cable and phone companies to control the flow of information into our homes hands them the key to limiting choice and competition in internet services."

Interactive Television

The Internet is not the only technology that permits interactivity. Cable and satellite also allow viewers to "talk back" to content providers. But it is **digital cable television,** the delivery of digital images and other information to subscribers, that offers the truest form of interaction. In 2008 there were 36.2 million digital cable subscribers in the United States. Many digital cable subscribers also use their cable connections to access the Internet. Currently, there are also 34.7 million users with cable modems connecting their computers to the Net via a specified Internet service provider, or ISP (NCTA, 2008). As a result, "must-carry" has taken on new meaning in the Internet age, as Congress and the courts debate cable's power to grant or limit access to its wires to outside service and content providers and those providers' right to demand that access. The essay "*Brand X:* Controlling the Flow of Information" on this page explores the landmark—and controversial—June 2005 Supreme Court decision in favor of cable's right to restrict outside providers' access to their lines.

Cable's digital channels permit multiplexing, carrying two or more different signals over the same channel. This, in turn, is made possible by *digital compression,* which "squeezes" signals to permit multiple signals to be carried over one channel. Digital compression works by removing redundant information from the transmission of the signal. For example, the set behind two actors in a movie scene might not change for several

WWW
Apple iTunes Video
www.apple.com/itunes

WWW
AOL In2TV
www.video.aol.com

WWW
Yahoo! Video
www.video.yahoo.com

As Barack Obama told an MTV online forum when he was running for the Democratic presidential nomination in 2007, "Facebook, MySpace, Google might not have been started if you had not had a level playing field for whoever has the best idea" (in Eggerton, 2007b, p. 22). After all, with no guarantee of access to users, who will take the necessary risks? The results, according to *Washington Post* technology writer Rob Pegoraro (2005), will be higher Internet connection prices (with little or no competition—why should cable and phone companies charge low rates?); low reliability and poor tech support (again, how happy are you now with your phone and cable companies' track record in these areas?); and limited choice of features (without competition, only the most popular and profitable bundles will be offered). "Broadband Internet access is far too important to be left to the cable guys or the phone company—especially since it will someday eliminate the need for separate phone and TV service," Pegoraro concluded (p. F7). *Brand X* "is both anticonsumer and anticompetition," added House Democrat Edward Markey. Congress must act to "ensure that national broadband policy reflects the open architecture model of the Internet and remains a medium friendly to innovation, entrepreneurial activity, and consumer-centric communications" (in McCullagh, 2005, p. 2). This concern is fueled, in part, by a report from the International Telecommunication Union ranking the United States 19th in the world in high-speed access for its citizens, falling behind countries that have adopted policies encouraging competition through open access to infrastructure (Internet World Stats, 2008). In addition, broadband in these countries costs less than one-half of what it does in the United States for a greater variety of sophisticated services (Kelleher, 2007).

The cable and phone companies respond that *Brand X* will correct these problems, as their newfound freedom to control their lines, because it creates additional incentive for them to invest more in their infrastructure, removes economic barriers to innovation. Moreover, opponents may see them as "cozy," but the cable and phone companies are fierce rivals, and it is this competition for customers that will drive greater economies and the growth of services for users.

Enter your voice. How comfortable are you knowing that your cable provider can restrict access to disfavored Web sites or video services refusing to pay a premium price for carriage? Or will the quest for profits drive MSOs (and phone companies) to offer as many services to as many people as possible? But how long can Internet sites expect a "free ride" (in the words of AT&T's chair, Edward Whitacre) over cable and phone companies' lines? But hasn't **network neutrality,** treating all comers equally, been not only the hallmark of Internet freedom but a driving force behind the Net's development and acceptance? Is tiered access—faster delivery and better service for Net sites willing to pay more for carriage—the answer? But if some sites get faster delivery and better service, by definition, others will get slower delivery and poorer service. This is not network neutrality; or is network neutrality an out-of-date concept? The Internet Non-Discrimination Act, introduced into the U.S. Senate in 2006, would have made network neutrality the law of the land. Despite an onslaught of 1.5 million e-mails, phone calls, and letters from American Internet users, the 22 Democrats and 11 Republicans on the House Subcommittee on Telecommunications and the Internet deadlocked, and the bill never came to a vote in Congress. In 2008, two congressional representatives, Democrat Ed Markey and Republican Chip Pickering, tried again for legislative protection for net neutrality, introducing the Internet Freedom Preservation Act (Karr, 2008). Do you favor such a law, or do you think that the government needs to stay out of Internet issues?

minutes. So why transmit the information that the set is there? Simply transmit the digital data that indicate what has changed in the scene, not what has not.

This expanded capacity makes possible *interactive cable,* that is, the ability of subscribers to talk back to the system operator (extra space on the channel is used for this back talk). And *this* permits the following services, many of which you already use: video-on-demand, one-click shopping (you see it, you click on it, you buy it), local information on demand (news, traffic, and weather), program interactivity (choose a camera angle, learn more about an actor's career, play along with game show contestants), interactive program guides, and as you'll read more about in Chapter 11, video games.

WWW

Cable Positive
www.cablepositive.org

Phone-Over-Cable

Another service offered by many MSOs is phone service over cable wires. Phone-over-cable has spread slowly. Currently there are 13.7 million cable-delivered residential telephone subscribers (NCTA, 2008). There are two reasons. The first is technical—although the technology for quality phone-over-cable exists, the problem is getting manufacturers to agree on compatibility standards. The second reason that phone-over-cable is slow in coming is consumer resistance. Many people, already dissatisfied with the level of service provided by their cable companies, are wary of relying on them for phone service as well.

WWW

Cable Television Advertising Bureau
www.onetvworld.org

But phone-over-cable offers an additional benefit to MSOs. If telephone service can be delivered by the same cable that brings television into the home, so too can the Internet. And what's more, if the cable line is broadband capable of handling digitally compressed data, that Internet service can be even faster than the service provided over traditional phone lines. Cable, in other words, can become a one-stop communications provider: television, VOD, audio, high-speed Internet access, long-distance and local phone service, multiple phone lines, and fax. This is **bundling.**

How valuable is a bundle-receiving subscriber to a cable/telco combination? Add together the bills you're probably paying right now—basic or premium cable, your Internet service provider, and your phone bill. What does that total? Now speculate on how much pay-per-view and VOD you might buy now that you have broadband and a superfast cable modem. And what would you pay for home delivery of real-time sports or financial data? And the MSO would collect each time you accessed an interactive classified or commercial ad. That's how valuable a bundled subscriber will be.

WWW

Net Neutrality
www.savetheinternet.com

Bundled services may be profitable for MSOs, but they raise the issue of concentration in a somewhat different form from that we've considered elsewhere. Specifically, what risk for consumers does putting this much power into the hands of one company pose? The chairperson of the U.S. Senate Antitrust Subcommittee, Herb Kohl, Democrat from Wisconsin, sees an ominous future for "average consumers." He said that people "may find almost all of their personal communications and information dominated by a very few, large media companies. Their phone, their movies, their Internet, their cable, their link to the outside world will be priced, processed, and packaged for them by one company that faces virtually no competition" (quoted in Albiniak, 2002, p. 7).

Mobile Video

The newest way to receive and view television is on a mobile device, either a cell phone or other portable video player. We've already seen in this chapter that Apple iTunes allows downloading of television programs not only to home computers but to portable iPods. DBS provider Dish Network has its version, letting subscribers download movies from their home receiver to their portable PocketDish. As for cell phone video receivers, Verizon's Vcast service (Chapter 7) can download music videos as well as music. Other early entrants into the mobile phone video race are phone companies Sprint, with PCS Vision, and Cingular, offering MobiTV. Fox Mobile Entertainment, the Cartoon Network, ESPN, Court TV, and NBC Mobile are just a few of the content providers striking deals with these services. All are chasing what promises to become a $1.5 billion business by 2009 (Oser, 2006), and the winners will be those who can best answer two questions: What content will people be willing to watch on mobile devices? and How big will the audience actually be?

Cell phone video providers think brief content works best. Fox Mobile, for example, creates **mobisodes,** special 1-minute scenarios of its television hit *24*. VCast provides brief clips of performances from CBS's *Rock Star: INXS*. Spider-Man creator Stan Lee's POW! Mobile distributes 1-minute episodes of comic book action via Cingular's MobiTV system; *The Accuser* and *The Drifter* are his titles.

DBS-provider Dish's Pocket Dish, only one of many mobile video options available to viewers

Portable video device providers such as Apple and Dish seem to think that longer fare will attract more viewers. They are heartened by the success of Sony's PlayStation Portable (PSP) video-game unit, with its 4.3-inch-wide screen. Designed to play specially manufactured video discs as well as games, it has become a successful movie-watching device. In the first 6 months of its availability, fans bought more than 5 million movie and television discs from among the 200 titles available from studios like Disney and Paramount. Content providers are especially excited over another of PSP's capabilities—it can connect to the

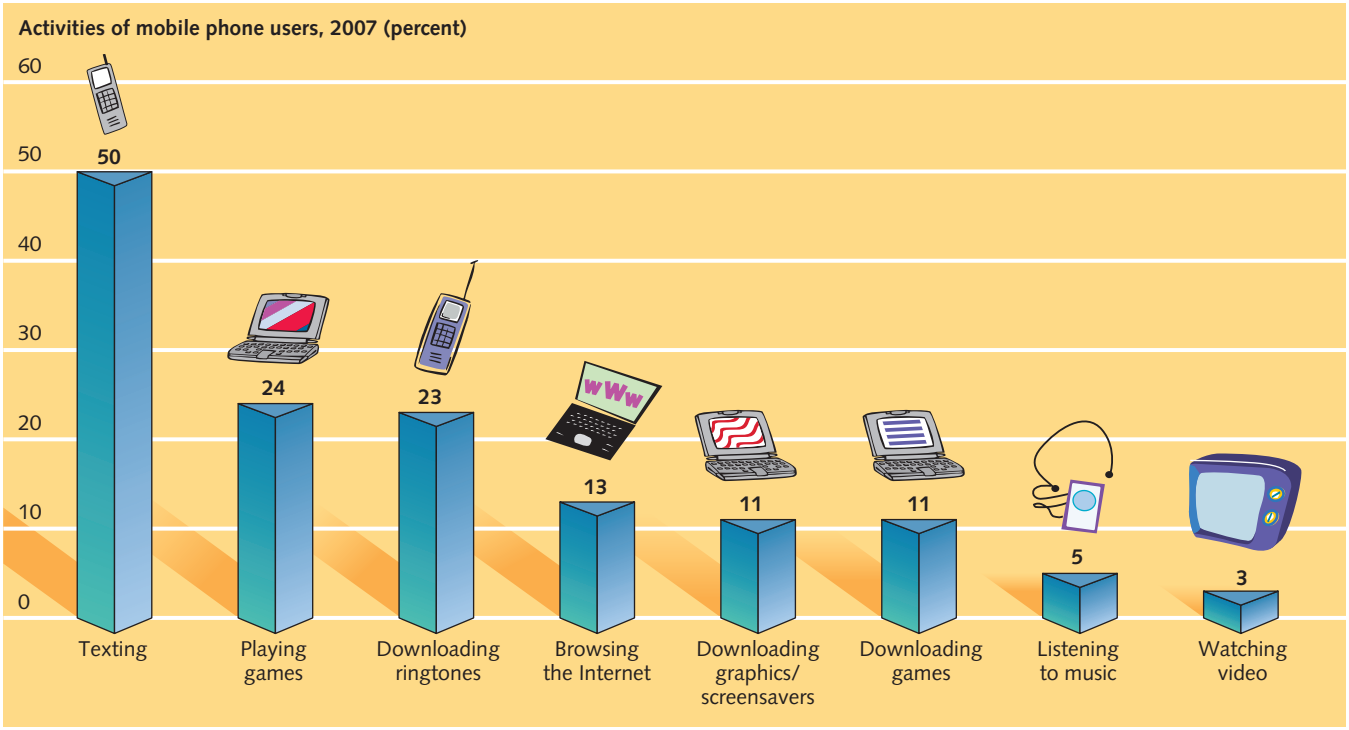


Figure 8.5 Activities of Mobile Phone Users, 2007.
Source: Cuneo, 2007.

Web for the downloading, storing, and viewing of even more video (McLean, 2005b). There is more to say about PSP and other mobile game devices in Chapter 9.

"No one would think of putting a newspaper on television. Why would you just put television on a cell phone?" asks CBS Mobile's Cyriac Roeding, expressing some of the doubt surrounding the size of mobile video's potential audience (in "Quote," 2006). Indeed, despite very optimistic predictions of the size of the mobile data business, as high as $37.5 billion annually by 2010 with more than 112 million cell phones in operation in North America, most of that traffic will be composed of uses other than video (Bednarski, 2007). For example, independent research company RBC Capital Markets discovered in a national survey that when asked to respond to the statement "I am not interested in watching TV programs or movies on my handheld device," 76% said "true" (Siklos, 2006). But, argue mobile video optimists, 24% of handheld video device users is still a lot of downloads for already-created content. You can see how people use their mobile phones in Figure 8.5.

Developing Media Literacy Skills

Recognizing Staged News

For years studies have shown that a majority of the American public turns to television as the source of most of its news and that viewers rank it as the most believable news source. Television news can be immediate and dramatic, especially when events being covered lend themselves to visual images. But what if they don't? News may be journalism, but television news is also a television *show,* and as such it must attract viewers. Television newspeople have an obligation to truthfully and accurately inform the public, but they also have an obligation to attract a large number of people so their station or network is profitable.

Even the best television journalists cannot inform a public that does not tune in, and the public tunes in to see pictures. Television professionals, driven to get pictures, often walk the fine ethical line of **news staging**—that is, re-creating some event that is believed to or could have happened. Sometimes news staging takes simple forms; for example, a reporter may narrate an account of an event he or she did not witness while video of that

LIVING MEDIA LITERACY

Turn Off Your TV

The Media Foundation (see Chapter 12) runs an annual campaign called TV Turn Off Week, typically in April. Hundreds of thousands of viewers around the world simply tune out for a week. There is a Web site (adbusters.org/campaigns/tvturnoff), posters, chat rooms, and contact lists, all designed to support communal action. You can involve yourself in the global community of TV-turn-offers by accessing the site and signing on.

But you, as a media literate individual, can test for yourself just how free you are of television's hold. In other words, whether you are a television fan or foe, you can see if you control your viewing or if your viewing controls you. To start, pick a 7-day period (or 5-day if that's how you choose to define a week) and simply stop watching. That means no television at all. No videos. No video games. If you are truly adventurous, enlist one or more friends, family members, or roommates.

Now the hard part. Changing your routine viewing habits for a few days will not do very much for you unless you reflect on its meaning. Ask yourself, and any confederates you may have enlisted, these questions:

1. How easy or difficult was it to break away from television? Why?
2. What did you learn about your television consumption habits?
3. How did you use the freed-up time? Were you able to find productive activity, or did you spend your time longing for the tube?
4. Describe your interaction with other people during the week. Did your conversations change? That is, were there alterations in duration, depth, subject matter?
5. To which other media did you turn to replace your television viewing? Why those in particular? Did you learn anything about them as "TV substitutes"?
6. If you were unable to complete the week of nonviewing, describe why. How easy or difficult was it to come to the decision to give up? Why?

Whether you are a television fan or foe, you can see if you control your viewing or if your viewing controls you.

7. Do you consider it a failure to have resumed watching before the week was up? Why or why not?
8. Once you resume watching, either after the week has passed or when you abandon nonviewing, place yourself on a scale of 1 to 10, with 1 being I-Control-the-TV and 10 being The-TV-Controls-Me. Explain why you rated yourself as you did.

event is played. The intended impression is that the reporter is on the scene. What harm is there in this? It's common practice on virtually all U.S. television news shows. But how much of a leap is it from that to ABC's 1994 broadcast of reporter Cokie Roberts, wrapped tightly in winter clothes, seemingly reporting from Capitol Hill on a blustery January night when she was in fact standing in a nearby Washington studio, her presence at the scene staged by computer digital technology?

The broadcasters' defense is, "This is not staging in the sense that the *event* was staged. What does it matter if the reporter was not actually on the spot? What was reported actually did happen." If you accept this view (the event *did* happen, therefore it's not news staging), how would you evaluate Fox News's Geraldo Rivera's 2002 reporting from "sacred ground," the scene of a battle in Afghanistan in which U.S. forces suffered heavy losses, even though he was miles from the actual spot? And if you accept digital alteration of news scenes to place network reporters at the scene, how would you evaluate CBS's common practice of digitally inserting its network logo on billboards and buildings that appear behind its reporters and anchors? If this staging is acceptable to you, why not okay the digital enhancement of fires and explosions in the news?

Some media literate viewers may accept the-event-did-happen argument, but another form of news staging exists that is potentially more troublesome—re-creation. In the mid-1990s a Denver news show ran footage of a pit bull fight it had arranged, and defended its action on the ground that these things "do happen." Watching video coverage of an Air Force bombing action in Iraq in 2003 from the relative safety of his hotel in Erbil, combat reporter Ashley Gilbertson was struck by the sight of a Fox News correspondent "crouching in front of sandbags, wearing a flak jacket and a helmet. He was supposedly on the front lines, reporting via a scratchy video phone. He had to

Did Geraldo Rivera engage in permissible or impermissible news staging when he reported from "sacred ground" although he was miles from the actual spot?

whisper, he said." But Gilbertson soon recognized the "distinctive architecture of our hotel." The correspondent "was reporting live" from a foxhole that had been "recreated" in his hotel room. The angry Gilbertson called the Fox reporter on his in-room phone and hung up so all could hear that this was a staged report (in Genoways, 2007, pp. 80–81). This staging was justified with the claim that it "could have happened."

Where do media professionals draw the line? What happens to the public's trust in its favorite news source as the distinctions between fact and fiction, reality and illusion, what is and what is digital, and reporting and re-creating disappear?

If you see a televised news story labeled as a re-creation or simulation, what leads you to trust the re-creator's or simulator's version? Media literate people develop strategies to analyze content, deciding where *they* draw the line and rejecting staged news that crosses it. The news producer must balance service to the public against ratings and profit, but viewers must balance their desire for interesting, stimulating visuals against confidence that the news is reported rather than manufactured.

Why did ABC feel compelled not only to have Roberts appear to report from in front of the Capitol Building but also to have it seem, by her dress, that she was quite cold, a seemingly benign form of staging? There are two possible explanations for staging such as this. One is the need to meet television audience demands for visuals. The second explanation is the assumption, widely held by television professionals, that people are incapable of reading, accepting, interpreting, and understanding important issues unless they are presented in a manner that meets viewers' expectations of the news. If this is accurate, media literate viewers must reconsider their expectations of the medium. If this assumption about viewers is incorrect, media literate people must make that clear to those who produce the news, either by choosing news programs that avoid staging or by protesting to those that do.

Resources for Review and Discussion

REVIEW POINTS

- In 1884 Paul Nipkow developed the first device for transmitting images. John Logie Baird soon used this mechanical scanning technology to send images long distance. Vladimir Zworykin and Philo Farnsworth developed electronic scanning technology in the 1920s, leading to the public demonstration of television in 1939.
- In the 1950s, the quiz show scandal, the business acumen of Lucille Ball, McCarthyism, and the ratings system shaped the

nature of broadcast television. Cable, introduced in 1948, would soon effect even more change.
- Cable, designed initially for the importation of distant signals, became a mature medium when it began offering movies and other premium content.
- Cable, dominated by large MSOs, offers programming in tiers that include basic, expanded basic, and premium cable. Some favor a new pricing scheme, à la carte.
- Direct broadcast satellite is the primary multichannel competitor to cable.
- A host of technologies influence the television–viewer relationship, including VCR, DVD, and DVR. Digitization and the Internet make possible interactive television, a particular strength of cable. Subscribers may also receive phone service over cable.
- Mobile video—over cell phones or other portable video devices—is beginning to emerge. Questions remain as to what types of content and which pricing models will succeed.
- Staged news raises several questions for media literate people about broadcaster integrity and respect for viewers.

KEY TERMS

Use the text's Online Learning Center at www.mhhe.com/baran6e to further your understanding of the following terminology.

nonlinear TV, 207
Nipkow disc, 208
pixel, 208
iconoscope tube, 208
kinescope, 208
coaxial cable, 209
microwave relay, 209
spot commercial sales, 210
peoplemeter, 213
sweeps periods, 213
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community antenna television (CATV), 215
master antenna television (MATV), 216
importation of distant signals, 216
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vast wasteland, 216
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first-run syndication, 220
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premium cable, 221
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QUESTIONS FOR REVIEW

Go to the self-quizzes on the Online Learning Center to test your knowledge.

1. What is the importance of each of the following to the history of television: Paul Nipkow, John Logie Baird, Vladimir Zworykin, Philo Farnsworth, and Newton Minow?
2. How do VCR, DVD, and DVR differ? How are they similar in the services they offer viewers?
3. What was the impact on television of the quiz show scandal, *I Love Lucy,* McCarthyism, and the Nielsen ratings?
4. How are the ratings taken? What are some complaints about the ratings system?
5. What were the contributions of John Walson and Milton Shapp to the development of cable television?
6. How does a program typically make it to the air? How does syndication figure in this process?
7. How have cable, VCR, DVD, DVR, and DBS affected the networks?
8. What are some of the changes in television wrought by cable?
9. What is first-run syndication?
10. Explain the difference between basic cable, expanded basic cable, premium cable, pay-per-view, and à la carte pricing.
11. What are importation of distant signals, premium cable, and fiber optics? How are they related? What do they have to do with cable's maturity as a medium?
12. What is DBS? What factors slowed its diffusion until recently?
13. What questions remain to be answered for the mobile video industry?
14. What are some of the forms that interactive television can take?
15. What is news staging?

QUESTIONS FOR CRITICAL THINKING AND DISCUSSION

1. Do you think single-sponsorship of television programs necessarily produces quality fare? Do spot commercial sales necessarily produce mediocre fare? Defend your position.
2. Do you agree with Newton Minow's assessment of television? If so, what can be done to improve the medium's performance?
3. As an independent producer, what kind of program would you develop for the networks? How immune do you think you could be from the pressures that exist in this process?
4. Are you a cable subscriber? Why or why not? At what level? Would you prefer à la carte pricing? Why or why not?
5. Is news staging ever permissible? If not, why not? If yes, under what conditions? Have you ever recognized a report as staged when it was not so identified? Describe what you saw.

IMPORTANT RESOURCES


Go to the Online Learning Center for additional readings.

INTERNET RESOURCES

Television History	www.tvhistory.tv
Zworykin	www.ieee.org/web/aboutus/history-center/biography/zworykin.html
Farnsworth	www.invent.org/hall_of_fame/56.html
Quiz Show Scandal	www.fiftiesweb.com/quizshow.htm
McCarthyism	www.apl.org/history/mccarthy/biography.html
Radio Television News Directors Association	www.rtnda.org
A. C. Nielsen	www.nielsenmedia.com
National Cable & Telecommunications Association	www.ncta.com
National Telecommunications and Information Administration	www.ntia.doc.gov
Cable and Telecommunications Association for Marketing	www.ctam.com
National Association of Broadcasters	www.nab.org
ABC	www.abc.com
NBC	www.nbc.com
Episodes of TV Shows	www.epguides.com
CBS	www.cbs.com
Children's Television Workshop	www.sesameworkshop.org
Fox	www.fox.com
Women in Cable & Telecommunications	www.wict.org
DirecTV	www.directv.com
Dish Network	www.dishnetwork.com
TiVo	www.tivo.com
ReplayTV	www.replay.com
Apple iTunes Video	www.apple.com/itunes
AOL In2TV	www.video.aol.com
Yahoo! Video	www.video.yahoo.com
Cable Positive	www.cablepositive.org
Cable Television Advertising Bureau	www.onetvworld.org
Network Neutrality	www.savetheinternet.com