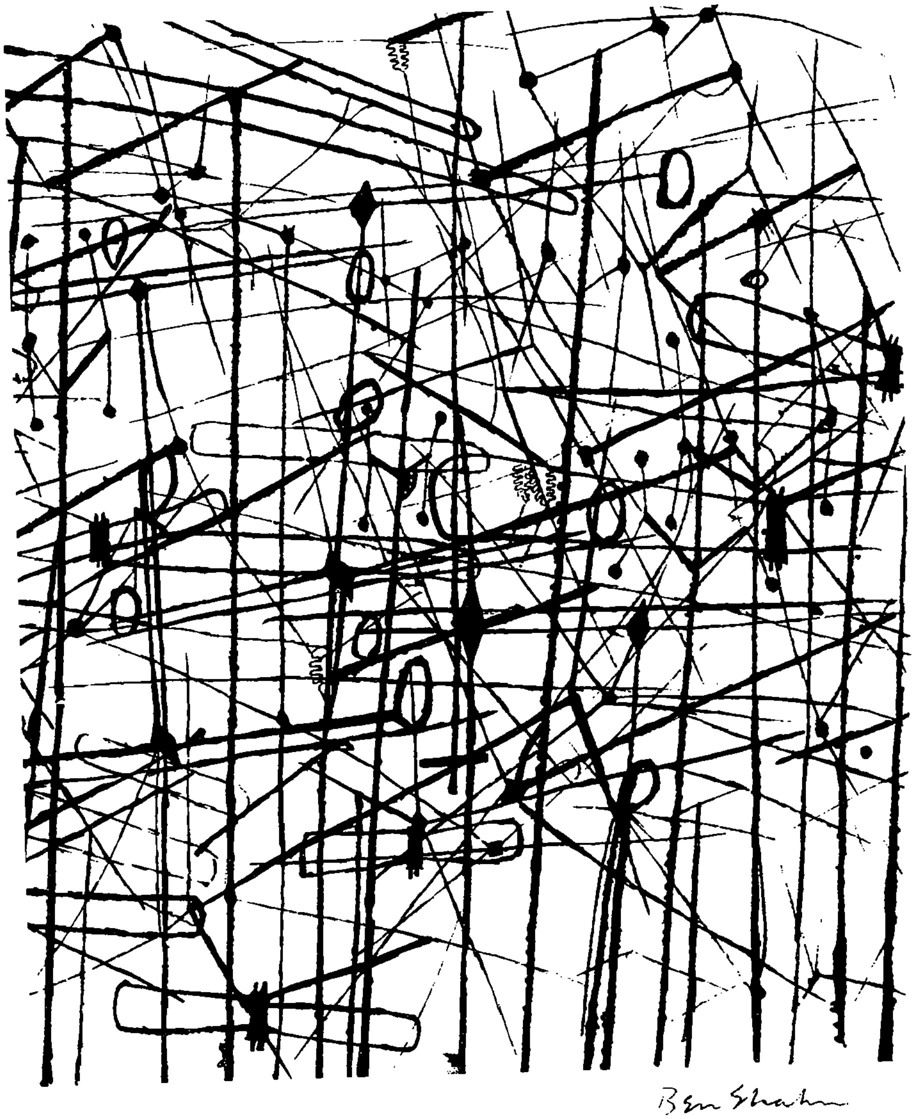


© Estate of Ben Shahn, 1953.

By 1953, when America's spreading roof-cover of TV aerials caught the imagination of artist Ben Shahn (detail above), 20 million U.S. households had television sets, and Walter Annenberg had launched his new TV Guide, *now America's best-selling magazine. Today, 98 percent of all American families own at least one TV set, more than own refrigerators.*

Television in America

"There has never been anything like the intimate relationship . . . between the American people and its television broadcasters," observed critic Michael Arlen. Watching television is the one thing almost all Americans do, and if the experts are right, they will be doing more of it every year for some time to come. Inevitably, TV has become a focus of much scholarly inquiry. Does television shape U.S. voting patterns or sway public opinion? Has it fostered a decline in literacy among the young? Is it a spur to violence, to sexism, to promiscuity? Here, Lawrence Lichty explains how TV acquired its present character; Stuart Shorenstein looks at public television's uncertain future; Stuart Brotman weighs the probable impact of cable TV, videodiscs, and other new technologies; and Joel Swerdlow surveys the research on television's effects on the way we view the world and live our lives.

SUCCESS STORY

by Lawrence W. Lichty

In many households in the United States during the early 1950s, Father came home one night, often just before Christmas, and placed a television set in the living room where the radio had stood. It came sooner to families in big cities and suburbs, sooner to people with higher incomes, and sooner to those living in the Northeast, where most of the new TV stations were. Because postwar America was the most affluent place on Earth, television, like the automobile, eventually came to everybody.

In one sense, television seems to be the world's first dispensable major technology. Theoretically, the complex industrial societies of the United States, Western Europe, and Japan could function quite well without it. This is not true of the printing press, the telephone, the radio, the digital computer. Were any of these to disappear, our economy, our public administration, and our defense system would be thrown into chaos.

Radio Days

Yet I would argue that television has also become essential, by the very fact that it has been around for 30 years, and we have adjusted to it, allowed it to alter our perceptions and choreograph the rhythms of daily life. Television, if only by default, is one of the tools modern societies now must use to sustain themselves. In many countries, as in our own, television and the central government are the only *national* institutions. Television is a baby sitter, an initiator of conversations, a transmitter of culture, a custodian of traditions. It is the creator—and showcase—of heroes. Psychologically, TV performs other, ineffable functions. If it were suddenly to disappear, what would happen to the 20 percent of Americans who watch 12 hours of television a day? One need not concede that TV is "good" to recognize that getting rid of it, like keeping it, entails a certain cost.

Television's roots go deep. It is the inheritor of functions once performed by serialized novels, by newspapers and photographs, by movies and the phonograph. But its content, like a froth, exists on the surface of things. The "substance" of TV is a derivative amalgam flavored by Madison Avenue and Hollywood, endlessly percolating the grounds of popular culture: the fiction of women's magazines, the clichés of newspaper headlines, the plotlines of best sellers, the fleeting tyrannies of political fads, the shifting banalities of the conventional wisdom. All of this television ingests, then throws back, reshaped and reinforced and trivialized. It happens over and over again, day after day. In relation to American society, television is always in the same place. It possesses a peculiar, implacable kind of stability.

For 30 years, television has been a flickering constant in American life. The TV industry and its structure; the nature and quality of television programs; the ratings system; the raised

Lawrence W. Lichty, 43, is professor of communications at the University of Maryland, College Park, and a former Wilson Center Fellow. Born in Pasadena, Calif., he received an A.B. from the University of Southern California (1959) and a Ph.D. from Ohio State University (1963). He is the coauthor of American Broadcasting *(1975, with Malachi C. Topping).*

From A Pictorial History of Television *by Irving Settel and William Laas. Copyright © 1969 by Irving Settel and William Laas. Used by permission of Grosset & Dunlap, Inc.*

In 1882, illustrator Albert Robida tantalized the French public with visions of a sight-and-sound device much like television. Above: his version of what, during the Vietnam era, came to be called the "living room war."

eyebrow of federal regulation—remarkably, none of these has changed, in its essential lineaments, since commercial TV emerged after World War II. Television thrives within a constellation of forces on which it depends but over which it has only limited influence. Its character, in effect, has been locked into place. Television might be a different medium if broadcasters did not have to rely for their revenues on advertising, but they do. Television would certainly be different if the audience were different (imagine the result if only people with mortgages or Ph.D.s in physics owned TV sets) or if it had been the offspring of the federal government, or even the Ford Foundation, instead of network radio.

Nothing was so important to the development of television as radio. Radio-as-progenitor gave television a voice, a code of conduct, and a way to make a living, just as radio itself had drawn its form and content from vaudeville, the concert hall, and the newspaper.

In 1923, when émigré engineer Vladimir Zworykin, late of the Russian Army Signal Corps, sought his patent for the first electronic TV tube (the iconoscope), the radio broadcasting business was growing rapidly. In 1922, the number of U.S. radio stations rose from fewer than 30 to 570.* The Radio Corporation of America (RCA), founded in 1919 as a U.S. government-promoted holding company for radio patents, grossed $50 million in 1924 from sales of radios.

Uncle Sam Steps In

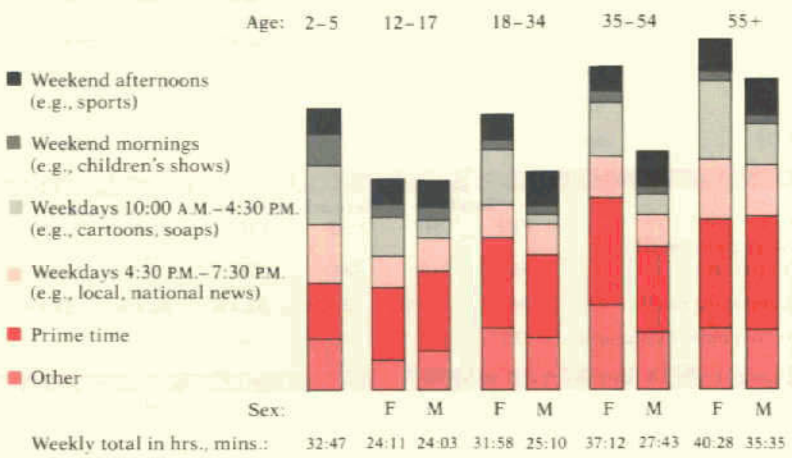
By the time of the Great Crash, a network structure was in place. Building on several years of experiments, RCA, through its subsidiary, the National Broadcasting Company, inaugurated a "Red" Network in 1926 by providing music and various talk shows to 21 affiliate stations. A second NBC "Blue" network was started a few months later. (NBC was ordered to divest itself of one network in 1943, and the Blue network became what is now ABC.) In 1929, cigar-fortune heir William S. Paley, then 28, took control of a floundering network, the Columbia Phonograph Broadcasting System—now CBS and still controlled by Paley. Together, the networks provided about 130 hours of programming a week in 1931. For a quarter century, the networks would dominate radio programming.

As the radio audience grew, advertisers turned increasingly to the airwaves, although many found the notion of "ether advertising" distasteful. "The very thought of such a thing," wrote the author of a 1922 *Radio Broadcasting* article, "is sufficient to give any true radio enthusiast the cold shakes." Yet, barring government subsidies, or a rush of Andrew Carnegies to endow stations, advertising was the only long-term way to pay for radio. In time, advertisers became the chief source not only of radio revenues but also of radio programming (e.g., the *Eveready Hour*, the *Cliquot Club Eskimos*, the *General Motors Party*), cementing forever the link between broadcasting and commerce.

Throughout radio's golden age, Washington stepped in occasionally from the sidelines, mainly to prune a tree that was otherwise doing nicely. With the blessing of most broadcasters, Congress in 1927 created the Federal Radio Commission (FRC) to straighten out a chaotic technical situation and assume responsibility for station licensing. The FRC eliminated some channels and consolidated others, then allowed radio's development to proceed—with the proviso that use of a channel was

*Much of radio remained "amateur" throughout the 1920s, with programming sometimes patched together minutes before broadcast time. Most stations with any real "staff" were owned by department stores and other retail outfits that sold radios, or by radio manufacturers themselves (e.g., Westinghouse, General Electric).

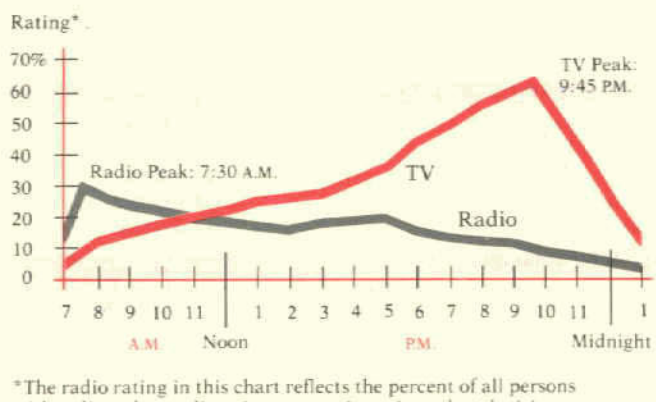
HOW TV VIEWING BREAKS DOWN, BY AGE, SEX, AND TIME



Source: A.C. Nielsen Company.

TV viewing activity is distributed disproportionately (above). Women, for example, watch more than men, older people more than younger (except children). Television has pushed radio's prime time from the evening to the early morning hours (below).

RADIO LISTENERS VS. TELEVISION WATCHERS



*The radio rating in this chart reflects the percent of all persons with radios who are listening at any given time; the television rating is based on the number of households watching television as a percentage of all TV households.

Sources: Arbitron; A.C. Nielsen Company.

THE TELEVISION INDUSTRY

TV Sets and TV Households

	TV sets sold to retailers (millions)	TV households (millions)	As % of all households	% with color TV
1950	7.4	3.9	9.0%	0.0%
1960	5.8	45.8	87.1	.7
1979	16.6	76.3	98.0	81.0

Television Stations in 1978

	Total		Network-affiliated		Independent	
	VHF	UHF	VHF	UHF	VHF	UHF
No. of commercial TV stations	515	210	484	128	31	82
% reporting profits	94.4%	73.1%	93.1%	82.1%	82.1%	57.1%
No. of public TV stations	112	168	—	—	—	—

Commercial TV Employment in 1978

	No. of employees	Total payroll (billions)
Total	70,805	$1.4
ABC, CBS, NBC	14,542	.4
Local station total	56,263	1.0

Television and Advertising

	Total U.S. adv. expenditures (billions)	Total TV adv. (billions)	TV adv. as % of all adv.	Magazine adv. as % of all adv.	Newspaper adv. as % of all adv.
1950	$ 5.7	$ .2	3.0%	8.4%	36.3%
1960	12.0	1.6	13.6	7.6	30.8
1979	49.7	10.2	20.5	5.9	29.4

Top Five TV Advertisers in 1979

1	Procter and Gamble	$289,600,000
2	General Foods	203,200,000
3	American Home Products	122,600,000
4	General Motors	117,300,000
5	Bristol-Myers	117,000,000

Cable TV Penetration

	No. of households with cable (millions)	As % of all TV households
1969	3.6	6.3%
1974	8.7	13.1
1979	16.8	22.0

Sources: *FCC TV Broadcast Financial Data; Television Factbook; Advertising Age,* April 30, 1980; *Cable Television Developments,* Oct. 1980; A. C. Nielsen Company; Cobett Steinberg, *TV Facts,* Facts on File, Inc., 1980; Public Broadcasting Service.

being conferred "but not the ownership thereof." The regulators were not reformers. In any event, the FRC found, as its successor, the Federal Communications Commission (1934) would find, that life and death power over individual stations did not bring much leverage over the system as a whole.

By the time of the Depression, as radio became a vehicle of popular entertainment, the broadcasting industry had acquired the shape it now generally maintains. Stations were organized into networks, AT&T "longlines" linked them up, and advertisers paid for programming. Broadcasters were experimenting with program formats that have since become familiar: news, drama, comedy, music, and variety shows. Politicians began using radio to publicize their conventions, FDR to broadcast his "fireside chats." Radio, with its capacity for virtually instantaneous nationwide communication, had become America's first *universal* mass medium.

The TV Age Begins

Slowly, working from the inside out, television displaced radio. It took radio's programming, its networks, its audience, its advertisers, its talent, its executives, its benign relationship with the FCC, and its way of doing business. Over time, the TV moguls made some changes, but the basic formula remained.

Television was radio's child. While the idea was not new—*Scientific American* had used the word *television* in 1907—it was not until the early 1920s that such pioneers as Charles F. Jenkins and Philo T. Farnsworth in the United States and John L. Baird in Britain reported the first successful video transmissions. The radio networks built on this foundation. NBC televised images as early as 1927 and in 1931 began broadcasting from an experimental station, W2XB5, on the 53rd floor of the Empire State Building. Atop the Chrysler Building, CBS soon had its own experimental TV station.

After World War II, the electronics industry finally got television out of the infant stage. Television sets reappeared on the market in 1946, costing an average of $280. Within two years, four networks—ABC, CBS, NBC, and the short-lived Dumont network—were in operation. By 1952, 108 stations were on the air.* Of these, more than half were owned by a company that

*From 1948 to 1952, the FCC imposed a "freeze" on new TV station applications while it studied certain technical problems—allocation of stations to various market areas, use of the ultra-high frequency (UHF) band, color television, and other matters. Following the precedent set by the Federal Radio Commission 25 years earlier, the FCC then allowed the development of television to proceed. Within one year after the end of the freeze, the FCC authorized creation of more than 400 new TV stations.

operated an AM radio station before 1925, half were owned by a company that owned another TV station, and four out of five were owned by a company that owned a radio station in the same market as its TV station. Ninety percent of the stations were showing a profit. TV's advance was abetted by skillful promotion. "How can a little girl describe a bruise deep inside?" asked one television manufacturer's advertisement. "No, your daughter won't ever tell you the humiliation she's felt in begging those precious hours of television from a neighbor."

A Tyranny of Fads

Radio was the obvious source of much television programming. Most of the radio stars of 1950—Martin and Lewis, Lucille Ball, Roy Rogers, Groucho Marx, and scores of others—became TV stars a few years later. To this ready-made menu, the networks added movies and a bigger dollop of sports than radio, lacking pictures, had ever been able to sustain. Puppet shows and, later, cartoons drew young children into the broadcast audience, just as action/adventure serials had done for radio. While television news combined the traditions, good and bad, of radio and newsreel reporting, TV made journalism a more prominent feature of broadcasting than it had ever been.

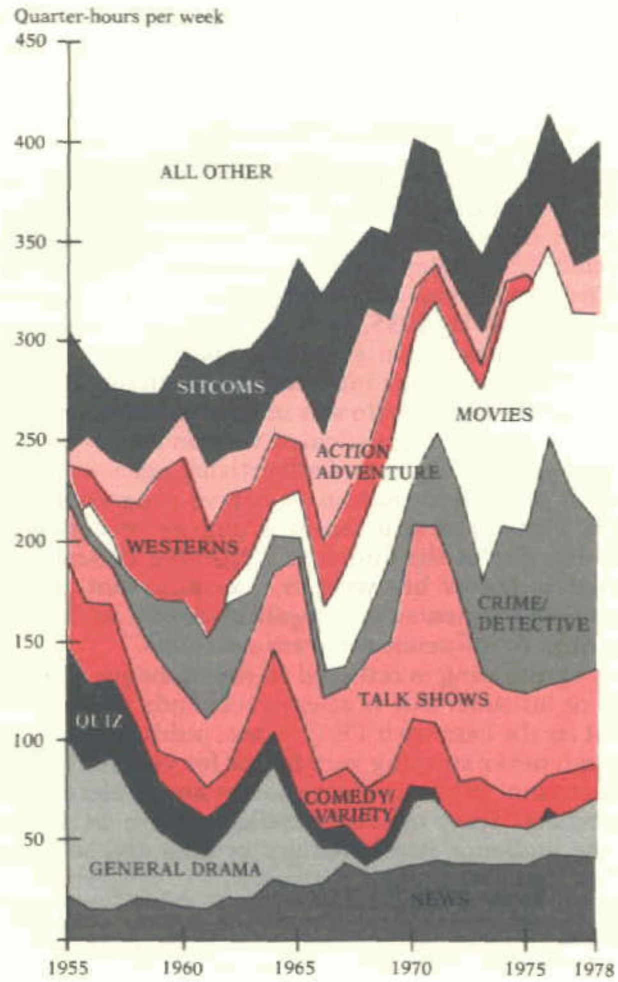
Television programming, like that of radio, consists of a finite number of trends mutating within a closed system. Most of them have radio precedents: the courtroom dramas (beginning with *They Stand Accused,* 1949), the "adult" westerns (*Gunsmoke* and *Wyatt Earp,* 1956), the medical dramas (*Ben Casey* and *Dr. Kildare,* 1962), and so on.* "Spinoffs" were not unknown on network radio—the Green Hornet, for instance, was the Lone Ranger's nephew—but television raised parthenogenesis to a science.

If something works, imitate it; if one show soars in popularity, put on others like it; if the ratings fall, take them off. One can study an electrocardiogram of this phenomenon, reflecting the variable vitality of "action" shows, in the incidence of TV violence, which rises and falls but oscillates from a nearly constant level. Few trends, or programs, last very long. In the delayed 1981 season, only 18 out of 80 prime-time network programs had been on for five years or more.

Contrary to the claims of the high-minded, television is not free to break this cycle. Broadcasters are in business not to produce bold, innovative programs but to attract audiences to

*Throughout this essay, the date given for programs is that of the TV "season." Thus, *Dr. Kildare* appeared during the 1962 season, which began in the autumn of 1961.

NETWORK PRIME-TIME PROGRAM TRENDS



Source: Computed by Lawrence W. Lichty, Christopher Sterling, and Susan Leakey. For more details see Christopher Sterling and Timothy Haight, *The Mass Media*, New York: Praeger, 1978.

Not shown on the graph are daytime soap operas (40 hours per week) and weekend sports (17 hours). Both have grown steadily since 1955.

view commercials. Audience taste—what the largest possible audience will stand for—sets television's immutable boundaries. Fred Smith, then director of radio station WLW, identified the fundamental principle in 1923. "The nature of radio programs," he wrote, "eventually will follow demands of economic conditions, which in other words, is but the demand of the public."

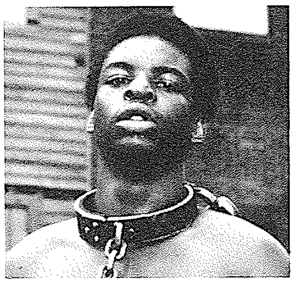
Nielsen's "Black Box"

Most early radio stations kept track of audience response, usually by monitoring the mail and phone. But as advertising increased, so did the accuracy—and importance—of polling. In 1930, Archibald Crossley and his Cooperative Analysis of Broadcasting Company began publishing once-a-year ratings based on telephone surveys. By 1935, the C. E. Hooper Company was providing "Hooperatings" on a monthly basis. Seven years later, the A. C. Nielsen Company introduced a mechanical "black box" that could be affixed to radio sets in selected homes to record listening habits. A more sophisticated version is now used to measure TV ratings.* Sponsors and advertising agencies rely heavily on this and other information to cancel programs or develop new ones. Networks and stations charge prices-per-minute based on the size of the audience. "Nothing in American life," author Martin Mayer has written, "certainly not politics, is so democratic, so permeated with egalitarianism, as the use of television ratings to influence program decisions."

TV programming is tethered to the audience. Like a kite, it has a bit of latitude. But it always responds to a tug from the viewers. As is the case with TV violence, public opinion rises and falls, though never straying very far, or for very long, from a glacial mainstream. When audience tastes and preferences change in a superficial way, television reflects them in a superficial way. If the audience itself changes profoundly, so does televi-

*The two largest ratings companies today are the A. C. Nielsen Company and Arbitron, though the latter is concerned exclusively with local ratings. Nielsen produces a weekly National Television Index based on 3,600 homes nationwide. For instant ratings, known as "overnights," Nielsen relies on a sample of 1,800 households in New York, Los Angeles, Chicago, and San Francisco. In addition, Nielsen analyzes the data from TV diaries logged by 100,000 viewers across the country to compile its quarterly Nielsen Station Index, which provides local station ratings. Not all members of the TV audience are equal. During prime time, advertisers have their eyes particularly on the middle-income women who still do most of America's shopping. Makers of products for the elderly—denture cream, Geritol, headache remedies—aim for the network news programs, 41 percent of whose audience consists of people aged 55 or older. Toy makers and candy companies dominate the weekend morning children's shows. Commercials tucked into soap operas are for housewives aged 25 to 49. While popular shows attract older men, teens, and children, prime-time programming must hold the 25-to-54 female audience or it will not survive.

THE TOP-RATED SHOWS IN HISTORY



UPI.

*All eight *Roots* episodes scored in the top 50 programs. In order to list other highly rated shows, only the top-ranking segment is included here.

	Scheduled Programs	% of all homes reached
1	Nov. 1980 *Dallas* (Who Shot J.R.?)	53.3
2	Jan. 1977 *Roots* (episode 8)*	51.1
3	Nov. 1976 *Gone With the Wind*—1	47.7
4	Nov. 1976 *Gone With the Wind*—2	47.4
5	Jan. 1978 *Super Bowl XII*	47.2
6	Jan. 1979 *Super Bowl XIII*	47.1
7	Jan. 1970 *Bob Hope Christmas Show*	46.6
8	Jan. 1980 *Super Bowl XIV*	46.3
9	Aug. 1967 *The Fugitive* (last show)	45.9
10	Jan. 1971 *Bob Hope Christmas Show*	45.0

	Special Events	% of all homes reached
1	Nov. 1963 JFK Funeral	96
2	July 1969 Apollo II Moon Landing	94
3	Nov. 1960 Election Night	92
4	July 1965 Gemini IV Space Walk	92
5	Nov. 1964 Election Night	91
6	Aug. 1968 Democratic Convention	90
7	July 1976 Democratic Convention	89
8	Nov. 1956 Election Night	89
9	Aug. 1976 Republican Convention	88
10	Feb. 1962 John Glenn Space Flight	81

Source: A. C. Nielsen Company.

ABC.

All but one of the top 10 scheduled TV programs were broadcast during winter months, when TV-watching is at its peak. Six of the 10 were shown on Sunday, when evening viewing is heaviest.

sion. There are many reasons for the end, in the mid-1950s, of the "Golden Age" of live, often inspired, TV drama. Not the least of these is that television's early core of affluent, urban viewers by then constituted a minority of TV households.

Television did induce, though it did not initiate, one major change in the relationship of advertiser to broadcaster. Throughout most of the radio era, advertisers paid for *and pro-*

duced their own programs. Then, in 1946, CBS radio regularly began producing shows of its own—notably *My Friend Irma* and *Arthur Godfrey's Talent Scouts*—and selling the time to advertisers. The notion was transplanted to television. By 1959, only one-quarter of all prime-time TV shows were produced by advertisers. (Today, the practice survives mainly in soap operas.)

The chief catalyst here was the rising cost of production. A typical hour-long variety show cost only about $6,000 in 1949, but more than $100,000 a decade later. The cost of a 30-minute drama grew from $15,000 in 1952 to more than $100,000 in 1970. Bearing production costs plus network fees represented a big commitment—and an act of faith—by even the wealthiest sponsors. At first advertisers reacted by sharing the costs of a program with one or more other companies. Eventually, they moved out of the business altogether, content to spread their bets and buy time on programs created by the big Hollywood production companies: Paramount, Universal, 20th Century-Fox, Warner Brothers, and Columbia.*

Fish Can't Fly

The decline of advertiser-produced TV coincided with the quiz show scandals—an episode that constitutes a parable of government attempts to regulate the TV industry.

Introduced in 1955, within six months Revlon's *$64,000 Question* was being seen in almost half of all TV households. True to the cycle of imitation described above, prime time was suddenly blinking with sponsor-produced quiz shows, all of them hungrily competing for viewers. By 1957, reports of "rigging" were being investigated. The climax came during congressional hearings in November 1959 when Charles Van Doren, a teacher at Columbia University and an NBC *Today* show celebrity, confessed that he had been briefed on questions and answers while competing on the quiz show, *Twenty One*. "I would give almost anything I have," Van Doren testified, "to reverse the course of my life during the past three years."

Amid a brief public uproar, the FCC in 1960 raised an eyebrow and enjoined the networks to clean house. Then—as atonement, it was implied—FCC Chairman John C. Doerfer proposed that each of the three networks begin providing an hour of public affairs programming each week. The networks agreed. Dur-

*The cost squeeze hit the networks, too. Because an hour-long show was considerably less expensive to produce than two half-hour shows, the networks prudently began to expand their action or dramatic programs into an hour. Four out of five prime-time television shows in 1956 were 30 minutes in length; fewer than half are today.

ing the 1962 season, there were more hours of documentary programming on television than any season before or since—253 hours. Yet, as the memory of the quiz show scandals receded, so, quickly, did the number of documentaries.

The FCC's "prime-time access rule," which went into effect in 1971, has suffered a similar fate. In essence, the rule requires TV stations in the 50 largest markets to carry no more than three hours of network-supplied programming during the prime-time hours of 7:00 to 11:00 P.M. The goal was to promote *local* programming, especially news and public affairs. To a certain extent, the rule was effective: Many stations now broadcast informational programs such as *PM Magazine*. Yet its primary—and unanticipated—effect has been to stimulate the growth of first-run, nationally syndicated quiz shows, created by independent producers. In 1975, two-thirds of the programs on all TV stations in the 7:30–8:00 P.M. time slot consisted of game or quiz shows; all five of the TV stations owned by the NBC network, for example, are currently airing the highly profitable *Family Feud*. Broadcasters have neatly finessed the intent of the access rule while following it to the letter.

One still reads, from time to time, laments in the press or in academic journals about what television "could have been," as if it could have been any different than what it actually became. Its future, as a mass marketing tool, was determined well before its birth, in a very Darwinian sense. A fish cannot fly; it swims.

Some dreamers now hail cable TV and videodiscs as technologies that may finally pull television into an era of "quality" and "innovation." They won't. They may supplant commercial TV just as TV in some ways brushed radio aside. But radio adjusted by becoming more "specialized," and so will network television. The new video media, for their part, will be subject to the very same market forces that shaped radio and television broadcasting. While the audience may have more choices, the proportion of "quality" programming appearing on the home screen will not be much different than it is now. The prospect is not a noble one, but it has, at least, the virtue of familiarity.

DOES PUBLIC TELEVISION HAVE A FUTURE?

by Stuart Alan Shorenstein

Throughout its history, public broadcasting in America has been a medium in search of a mission.

It was born during the early 1950s as an attempt to harness the educational potential of the "electronic blackboard." It was revamped during the '60s as an institution designed to preserve and foster America's (and, cynics would add, Britain's) "cultural heritage." Over the course of three decades, public broadcasting has received lavish praise, pointed criticism, and more than $3 billion in public and private money.

Public TV now faces serious trouble. In a 1979 report, a blue-ribbon commission impaneled by the Carnegie Corporation handed down this verdict:

> We find public broadcasting's financial, organizational, and creative structure fundamentally flawed. In retrospect, what public broadcasting tried to invent was a truly radical idea: an instrument of mass communications that simultaneously respects the artistry of individuals who create programs, the needs of the public that form the audience, and the forces of political power that supply the resources. . . . Sadly we conclude that the invention did not work, or at least not very well.

The Carnegie Commission did not recommend that the whole effort be scrapped. Predictably, it put forward instead a meticulously crafted reorganization plan; it called for increased funding. But the commission's ruminations have roused little interest in Congress or the White House, both of which have lately sought to trim spending, not subsidize expensive "frills."

Public television's chronic funding difficulties and organizational headaches persist. Despite attempts to reach out to a more diverse clientele, public TV still attracts only a small prime-time audience that remains disproportionately white, college-educated, and affluent. About one-fifth of public TV's prime-time hours are taken up with shows produced abroad—in England primarily, but also in Canada, Australia, West Ger-

Advertisement for Lillie, *a popular PBS series produced in Great Britain and broadcast in the United States in 1979, thanks to a grant from the Mobil Oil Corporation.*

many, and even Japan. And now, to compound its problems, public broadcasting is facing increased competition from cable TV, satellite-to-home transmission, videocassettes, and videodiscs—competition that may ultimately rob it of its more popular offerings and of its role as the alternative to the commercial networks.

Just as serious is public broadcasting's perceived lack of purpose. ABC, CBS, and NBC are in business to make money. What is public television in business for? Instruction? Culture? Ratings? Survival? In fact, there are 280 local public TV stations across the United States, all of them autonomous. They are united by no common mission (i.e., to be "a civilized voice in a civilized society" as the Carnegie Commission put it). Rather, as former *New York Times* critic Les Brown once noted, the only joint purpose seems to be the pursuit of congressionally authorized funds.

At the same time, since none but the biggest public TV stations have the capacity to produce much original programming, local stations have come to depend on the daily PBS network "feed" out of Virginia for more than 70 percent of their shows. These programs are hatched by station executives in the flagship public stations, including WETA in Washington, WGBH in Boston, and WNET in New York. Many of these executives are veterans of foundations, or universities, or cultural institutions; a few are network refugees. Well-educated, if not intellectuals, committed to "uplift," they are responsible for the genteel, upper-middlebrow quality of public TV's typical offerings, a quality that is public television's signature and, arguably, its chief weakness. "From the very first," writes critic Benjamin DeMott, "the makers of what we've come to know as public TV have behaved as though their prime duty was to coat the land with a film of what can best be described as distinguished philistinism, lifelessly well-meaning, tolerant, earnest, well-scrubbed—and utterly remote from what is most precious and vital in the soul of this nation."

Public television started out at a disadvantage in the United States. In Britain, West Germany, Japan, and Canada, television, like radio broadcasting before it, was initially state-run. People grew accustomed to paying for TV out of their own pockets. By the time advertiser-supported television came along, public TV was already well established—not as an adjunct but as the leader in the medium.

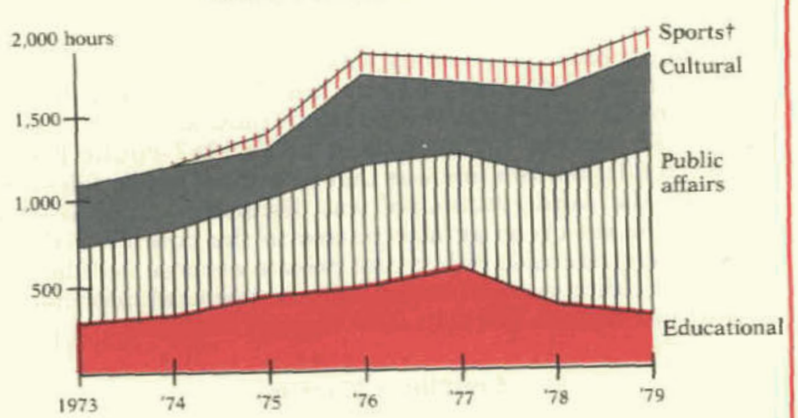
In the United States, the story was exactly the reverse. Here, commercial broadcasting was already in full bloom by the time the Federal Communications Commission (FCC) in 1952 set aside 242 stations, mostly in the UHF frequency, for noncommercial, educational use. There was little popular demand for educational TV; the idea hadn't occurred to most Americans.

The FCC, it should be noted, was doing public television no great favor, since most TV sets were only equipped to receive VHF. The new stations, moreover, were run primarily by educators with little or no broadcasting experience. (A few were veterans of educational radio.) In contrast to the situation in Britain after 1954, when many BBC employees moved laterally to ITV, the new commercial network, few American commercial broadcasters were tempted by the low pay and relative invisibility of educational TV. By 1957, only 21 educational broadcasting stations, run by cities and towns, local school systems, or universities, were actually on the air.

With a few exceptions—e.g., *Sunrise Semester* (which made its debut in 1957), and eventually *Sesame Street* (1969) and *The Electric Company* (1971)—the promise of the electronic blackboard went unfulfilled. There was never enough money to produce good programming. Many educators, then as now, were highly skeptical of TV's pedagogic value. By the early 1960s,

Stuart Alan Shorenstein, 33, is a partner in the New York law firm of Friedman, Leeds, and Shorenstein and special professor of communications law at Hofstra University Law School. He received a B.A. from Duke University (1968) and a J.D. from New York University (1971).

WHAT'S ON PUBLIC TV*



*Hours of programming distributed annually to local stations by PBS.

†Until 1974, sports programs were included in the "cultural" category.

Source: Public Broadcasting Service.

The number of hours of original programming distributed by PBS has been growing, though internal fluctuations by category are significant. Public affairs programming now accounts for almost half of PBS's schedule; this includes 130 hours for the ABC World News Tonight *(captioned for the deaf). Educational programming—the most costly to produce—has dropped substantially. In 1979, PBS paid $9.2 million to acquire foreign programs, and earned $2.5 million from sales abroad of its own shows.*

noncommercial TV was in disarray. Fewer than 75 educational stations were in operation around the country, and the few programs they shared had to be "bicycled" from one station to the next. Their audiences were small.

Public TV got its first transfusion under the Kennedy administration when Congress enacted the 1962 Educational Facilities Act, which authorized up to $32 million in matching funds over five years to support noncommercial broadcasting. That same year, Congress required all TV sets sold after 1964 to be able to pick up UHF as well as VHF channels. The number of noncommercial stations now began to multiply, reaching 107 by 1966, when the Carnegie Corporation, intrigued by the possibility of "networking," impatient with the American system's shortcomings, and inspired by the manifest achievements of the

BBC, charged a select commission to look at the future of noncommercial broadcasting.

It was the era of Lyndon Johnson's Great Society, when publishing a blue-ribbon study was often tantamount to seeing its recommendations enacted into law. Within a month of its release, the Carnegie Commission report (now known as "Carnegie I") had become the nucleus of LBJ's 1967 Public Broadcasting Act. Its bottom line was that a national *public* television network—the word *educational* was discarded as unattractive —should be set up as an alternative to the commercial networks, at considerable public and private expense, for the purpose of providing cultural enrichment and general information, not just instruction. The act sailed through Congress.

Creating a Monster

To oversee operation of the new system, Congress created the nonprofit Corporation for Public Broadcasting (CPB) under a private, nonprofit board to be appointed by the President and confirmed by the Senate. CPB's main duties were to pay for programs and distribute funds, including an annual congressional appropriation, to member stations. CPB, in turn, spun off the Public Broadcasting Service (PBS) to link up local stations, creating, in effect, America's "fourth network." The purpose of this complex organizational layout was to insulate public television from White House and congressional interference.

This is the foundation on which public broadcasting, as Americans have come to know it, has grown. It has expanded rapidly. In 1967, only 119 noncommercial TV stations were on the air; by 1979, the number had climbed to 280. Over roughly the same period, public broadcasting's annual income (for TV and radio) rose from $58 million to almost $600 million, with more than one-quarter of it coming from Washington.*

Public television, however, has had its growing pains. Since its inception, it has been wracked by bitter, if tedious, jurisdictional conflicts among CPB, PBS, and the hundreds of member stations. Was PBS only responsible for the technical job of "networking," or could it select programs too? Was CPB just a funding body, or did it in fact have ultimate control over what went on the air? No one knew. In trying to insulate public broadcasting, Congress inadvertently created something of a monster.

*In 1979, public broadcasting's income was $599 million, of which 27 percent came from the federal government, 40 percent from state and local governments (including state colleges). About 84 percent of total revenues are earmarked for public television, the remainder for National Public Radio.

The "double-hull" buffer between politics and public television proved rather porous in any event. While Congress declared CPB to be a *private* entity (it is not an agency of the U.S. government), it failed to provide for guaranteed, long-term funding. Congress also left selection of the corporation's board to the vagaries of partisan politics.

Once Burned, Twice Shy

President Richard Nixon took advantage of both oversights in 1972 when he abruptly vetoed Congress's $155 million, two-year appropriation bill for CPB because he disapproved of what he saw as a certain bias against his administration in such programs as *The Elizabeth Drew Show, Black Journal,* and *Washington Week in Review.* Almost immediately thereafter, Nixon was able to make six new appointments to CPB's 15-member board, putting his supporters firmly in control. The board promptly ordered cancellation of all but one of public television's public affairs programs. (*Black Journal* was the lone survivor.) While public broadcasting's funding procedure was modified after President Nixon's post-Watergate resignation, the scar tissue remains visible—and sensitive.*

Public television's other big problem has been programming. During the late 1960s and early '70s, as public TV was beginning to take shape, critics were rather tolerant of the system's shortcomings. Give it time, they urged. A decade later, it is clear that despite some notable successes—*Great Performances, The MacNeil-Lehrer Report, Sesame Street*—public television's overall record remains uneven.

Lack of money is the biggest single factor. Public broadcasting's total revenues in 1979—some $599 million—equal about 5 percent of total *commercial* broadcast revenues. In per capita terms, U.S. public TV receives less than public broadcasting in any of the other industrialized democracies.† As a result, American public TV stations simply don't have the money to produce much original programming.

This is one reason why PBS airs so many imported shows,

*Congress in 1975 enacted a Public Broadcasting Financing Act, which provided for up to $570 million over a five-year period under a matching formula guaranteeing $1 in federal funds for every $2.50 (since reduced to $2) public TV stations could raise in funds from viewers and foundations. By providing for money over a period of years, and tying federal outlays to a matching-fund "trigger" mechanism, Congress effectively protected public television from direct financial and political pressure. CPB and PBS, meanwhile, have agreed to divide responsibilities between them. For the moment, there exists a fragile truce.

†The per capita cost of public broadcasting in the United States in 1978 was $2.53, compared with $9.14 for Japan's NHK and $20.35 for Canada's CBC.

THE BBC: FEELING THE PAINS OF COMPETITION

American critics and audiences, impressed by British Broadcasting Corporation programs aired on U.S. public television (such as *Great Performances* and *I, Claudius*), commonly regard the BBC with a certain reverence. Yet British audiences have lately grown more critical of the publicly financed broadcasting empire once known fondly as "Auntie." While the BBC's TV offerings arguably remain the "least worst" in the world, like Britain's economy, they have come down in the world.

The BBC was established under royal charter in 1926 as a combination national radio network and British "Voice of America." The corporation was shaped from the outset by Director General John (later Lord) Reith, who saw broadcasting as "a drawn sword parting the darkness of ignorance." Reith gave the public what he thought was good for them—classical music, lectures, drama, public affairs programs, and the like. By the time he retired in 1938, Reith had ensured that the BBC's fledgling television arm would be formed in the image of BBC radio.

BBC television remained a "drawn sword" for as long as it remained a monopoly. But in 1954, in a move Reith likened to "smallpox, bubonic plague, and the Black Death," Parliament created the commercial Independent Television Authority and its 13-station (now 15-station) ITV network. Unburdened by an elitist legacy, unabashedly pandering to mass tastes, ITV had a firm hold on 70 percent of Britain's TV viewers by the late 1950s. As its audience dwindled, the BBC found it increasingly hard to justify an annual subsidy (currently $690 million) based on license fees paid by all TV households.

despite complaints from talented American writers, producers, and actors. Purchasing a series already produced in, say, Great Britain, may cost 10 percent of what it would cost to produce it in the United States. The low price tag attracts corporations such as Mobil and Exxon, which underwrite almost all of the imported programs shown on public television. Public broadcasters would *like* to produce more blockbusters like *The Adams Chronicles*. They can't afford to.

Public television suffers, too, from a certain inevitable timidity. It is quite all right to be an "alternative," but *too much* of an alternative might not sit well among benefactors on Capitol Hill or in the White House or in the local community. Public affairs programs are especially vulnerable. Initially, public TV

Under Sir Hugh Greene, a veteran broadcaster who was appointed Director General in 1960, the BBC began to fight back. Greene was willing to take risks in current affairs, dramatic, and comedy programming; it was he who introduced *The Forsyte Saga* and the satiric *That Was the Week that Was.* "With [Greene] in command," a colleague recalled, "Auntie changed its sex and for the first time in its life was young." Sir Hugh got a vote of confidence in 1964 when Parliament awarded the BBC a second channel and slapped a stiff tax surcharge on ITV's "immorally" high profits. By the mid-1960s, BBC-1 and 2 had won back half of Britain's viewers.

But competition has had its sour consequences. To maintain its share of the audience, the BBC ultimately was forced to evolve from educator into mass entertainer—in short, to emulate its commercial rival. Today, 14 percent of the BBC's schedule consists of movies and American imports like *Starsky and Hutch* and *Dallas.* While a substantial 18 percent is still devoted to public affairs and documentaries, and 14 percent to the pedagogic Open University, music and ballet offerings have declined to about 1 percent of total programming, drama to about 5 percent.

The BBC labors under other burdens. Production costs have risen with inflation, and the BBC does not have as much control over license fees (currently about $80 per year for color TV, $28 for black and white) as ITV does over its advertising rates. The affluent commercial network, meanwhile, has been able to lure away top BBC stars and executives, and, with such programs as *Upstairs, Downstairs* and *Tinker, Tailor, Soldier, Spy,* even to erode Auntie's near-monopoly on respectability. In 1980, Britain's Conservative government, committed to free-market principles, awarded a second channel to the commercial network over the protests of the BBC.

was a pacesetter, airing more documentaries in the 1968–69 season than ABC, CBS, and NBC combined. Some, such as those in the *Behind the Lines* series, were highly controversial. Then President Nixon cracked down. Once burned, twice shy: While PBS eventually got back at Nixon by broadcasting gavel-to-gavel coverage of the 1973 Senate Watergate Committee hearings, public TV's news record since then has been undistinguished.

To be blunt, PBS has neither the freedom nor the resources to compete with the commercial networks in news or public affairs programming. It has no overseas bureaus, no central news desk, no equivalent of the networks' evening news programs. PBS barely covered the 1980 Republican and Democratic conventions. Even the best of public TV's news shows, like *The MacNeil-Lehrer Report*, do not approach the popularity or the visual range of CBS's *Sixty Minutes*.

Ratings are not PBS's strong point, either. PBS's prime-time ratings share is about 3.5 percent; even the most popular shows on public TV, such as the periodic *National Geographic* specials, have never reached more than 16 percent of television households. A commercial show with that rating would be canceled at once.

No Place To Go

Public broadcasting's failure to achieve "parity" with commercial television is understandable. It was, first, a late starter. By the time PBS came into existence, Americans had already become conditioned—by radio even before television—to free, mass-appeal programming. Second, public television was created as an alternative. Unlike commercial TV, it deliberately does *not* aim at the lowest common denominator. Thus, say PBS defenders, there is no point in analyzing public TV's record in terms of commercial TV's Nielsen ratings. (PBS press releases, of course, take a different view of the ratings when a public television program scores high.)

Public television's dilemma is that if it can't attract large enough audiences, many of its funding sources—e.g., corporations, foundations, and the federal government, not to mention the audience itself—may dry up; if it gears its programming to the ratings game, it will betray the principles on which it was founded (and may not increase its ratings anyway). There may be no middle ground, to judge from reaction to the announcement last year that a consortium of public TV stations was planning to air, for about $1 million, 13 reruns of the acclaimed but canceled CBS series about Harvard law students, *The Paper Chase*. "If we're going to keep blurring the line between commercial and public TV," wrote Tom Shales, television critic for the *Washington Post*, "why have public TV at all?"

What complicates matters for public television is that the programs that do make it distinctive—the concerts, operas, dramas, and imported specials—are among the kinds of programs most threatened by cable television, videocassettes, and videodiscs. To be sure, PBS has been in the forefront of some of the new technologies. It began broadcasting to local stations via the Westar satellite in 1978 and will soon divide itself into three distinct networks (PTV-I, II, and III) offering three simultaneous program services for local public broadcasters to pick from.

This will give PBS a certain flexibility—assuming it can find the money to pay for all the new programming—but that may not be enough. Viewers, after all, will still have only one public TV channel in their area, not three.

Cable operators, by contrast, can offer their subscribers as many as 80 channels. According to one recent study, the availability of cable TV tends to cut proportionately far more into the time spent watching public television than into time spent viewing network fare. By decade's end, it should be commercially profitable to market, over cable, everything from *Live from Lincoln Center* to shows like *Upstairs, Downstairs*. Indeed, commercial pay networks will probably be able to outbid PBS for the best programs. Public television could become a "second-string" market, airing programs only after their commercial potential has been exhausted. How will Congress justify using tax dollars to support a system that the market has replaced?

If the new technologies do indeed siphon off PBS's more popular offerings, public television's strategic choices will be limited. It could move into programming that is not yet commercially acceptable, thereby becoming the risk taker of the TV industry, the developer of new talent, the bold experimenter. Unfortunately, it isn't likely that this kind of TV is going to attract a broad audience, or a broad coalition of backers in Congress.

Another possibility is a return to "localism." By shedding the mantle of CPB and PBS, public television stations might focus on serving the communities to which they broadcast—airing low-cost documentaries on local issues, presenting programs sponsored by the local school board, and so on. This notion, too, is probably doomed. First, public TV's centralized "national" bureaucracy is unlikely to phase itself out of existence. Second, how would Washington equitably funnel money to 300 local public TV stations, all of different sizes and with different audiences? Third, as cable owners have discovered, a steady diet of local programming does not hold viewers.

In the end, none of public television's options seem very promising. Billion-dollar injections of federal funds are unlikely. Yet, without them, public TV cannot stay where it is and has no place to go.

THE NEW ERA

by Stuart N. Brotman

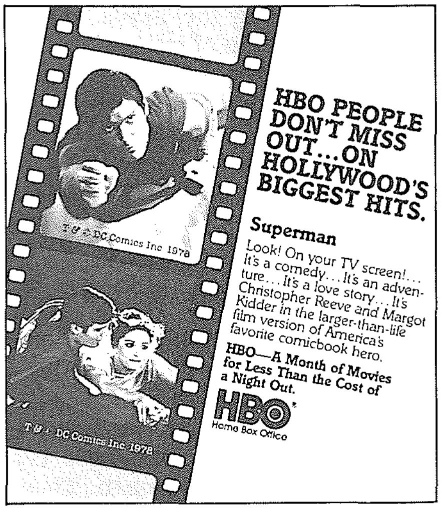
One of the more memorable images from the movies of the 1970s was that of anchorman Howard Beale in "Network" urging his TV audience to open up their windows and shout: "I'm mad as hell, and I'm not going to take it anymore."

Unlike Beale's frustrated viewers, Americans during the 1980s will acquire a powerful tool with which to register their dissatisfaction with traditional TV programming—one that will allow them, in effect, to vote with their pocketbooks. The tool is new video technology. If one believes the enthusiasts, it holds out the promise of irrigating a wasteland, bringing a vast array of quality television programming into the living room at a moderate price. For their part, skeptics point to the history of conventional TV broadcasting, itself once hailed as the hope of the future: The claims made for any budding technology, they contend, are always too good to be true.

Many of the new TV technologies (e.g., cable television, subscription TV, and videocassettes and discs) have in fact been "promising" for years. Until the late 1970s, however, the performance of innovative TV technology companies was generally unremarkable, their growth stymied by federal regulation, scarce venture capital, and, to some extent, a public willing to settle for the menu that ABC, CBS, and NBC provided.

All that has changed. Studies in 1979 by the *Washington Post* and Peter D. Hart Research Associates, for example, document a certain impatience with network TV programming —and point to an expanding pool of viewers willing to *pay* for some alternative. Investment in the new TV technologies, both by businessmen and consumers, is up sharply; entrepreneurs are now backed by the financial resources of such firms as IBM, the New York Times Company, Time Inc., Warner Communications, and Getty Oil. And the Federal Communications Commission (FCC), following the lead of federal courts, has substantially freed the cable TV industry from 20 years of sometimes capricious federal regulation.

The television landscape, in sum, is rapidly changing. While the familiar broadcast channels divided among independent



Newspaper advertisement for Home Box Office, 1980. Owing largely to the advent of cable television systems, half of all U.S. households now can receive nine or more TV channels.

© *1980 Home Box Office.*

stations and the local affiliates of ABC, CBS, and NBC are not about to fall into disuse, they now have competition. ABC, for example, won the rights to the 1984 Los Angeles Olympics with a $225 million bid, but the runner-up, offering $190 million, was neither CBS nor NBC but T.A.T. Communications, a diversified company with cable interests, owned in part by Norman Lear. A subscription TV company called ON-TV, also owned in part by Lear, successfully outbid ABC for rights to the June 1980 Roberto Duran–Sugar Ray Leonard boxing match. The prospects are so promising financially that cable companies are scrambling to win franchises from local governments in communities that lack cable service—including Cincinnati, Chicago, and four boroughs of New York. It has been called "the last great gold rush."

For the most part, the new video technologies are now on the market, or soon will be. Whether their "product" will simply amount to more of the same situation comedies, sports, soap operas, and movies, however, is a subject of much speculation.

Let us begin with a brief primer on a few of the new electronic media.

Cable television transmits video signals through a coaxial cable, usually placed under streets or on telephone poles; no broadcast spectrum is used. As of last autumn, there were about 4,300 cable systems in the United States and most *urban* systems now operating have at least 20 channels, although not all of them are in use. (Two-thirds of all cable systems currently carry 12 channels or less, but channel capacity will increase dramatically during the 1980s.) About one-fifth of all U.S. households—15 million of them—are "wired" for cable, and the number of wired households has been growing by 20 percent annually. For a $5 to $10 monthly fee, each cable subscriber receives a basic service ("basic cable") consisting of all broadcast signals from local TV stations plus a variety of satellite-fed special services, such as a children's channel, an all-news channel, an all-sports channel, and an all-religion channel.

Movies and Sports, Sports and Movies

Most cable systems also offer piggyback packages for a separate monthly fee ("pay cable"), such as Home Box Office (HBO), a subsidiary of Time Inc., and Showtime, a joint venture between Teleprompter (the largest cable company) and Viacom International. These packages typically offer 12 to 16 recent Hollywood films per month. They also provide sporting events that are not televised by commercial stations and, on occasion, original entertainment specials. The cost of one of these packages to the consumer is between $7 and $10 per month above the basic rate. Pay cable is growing fast. It was in 4.4 million homes in October 1979, 5.7 million in April 1980. Total cable industry revenues (pay and basic) in 1979 approached $2 billion.

Subscription television (STV) involves a conventional broadcast station, usually in the UHF frequency band (i.e., channels 14 through 83), that transmits scrambled signals to subscribing viewers with leased decoders. The scrambled signals are beamed for a portion of the day, typically 8 to 12 P.M. weeknights, with some expanded daytime programming during the weekend. (Under FCC rules, these STV stations are required to broadcast at least 28 hours of unscrambled, nonpay programming per week). Pay offerings on STV resemble those of pay cable—primarily feature films and sports. The average monthly fee for this service is $20. There are now about 20 STV systems with some 450,000 subscribers. Several dozen STV applications are awaiting FCC approval.

Stuart N. Brotman, 28, is special assistant to the Assistant Secretary of Commerce for Communications and Information, National Telecommunications and Information Administration (NTIA). Born in Passaic, N.J., he received a B.S. from Northwestern University (1974), an M.A. in communications from the University of Wisconsin, Madison (1975), and a J.D. from the University of California, Berkeley (1978). He has written widely on communications law and policy. The views expressed in this essay are those of the author and do not necessarily reflect those of the NTIA.

Communications satellites have revolutionized the transmission of distant broadcast signals to cable systems by dramatically lowering the cost of terrestrial transmission (usually accomplished by sending video signals through long-distance telephone lines leased from AT&T). The leader in the domestic satellite field has been RCA, with its Satcom I and Satcom II. Western Union also has a video transmission satellite, known as Westar. Each satellite has a number of channels, called transponders, that can be leased for transmission. Transponder leasing gave an important boost to the pay cable industry because it allowed cable programming to be efficiently networked across the country.* HBO led the way in 1975, and today virtually all pay cable services transmit to "receive-only" antennas owned by subscribing basic cable companies.

Aiming for the Bottom

The importance of all of these new video systems lies less in the technology *per se* than in the chance—albeit a slim one—to break the grip of the networks on TV programming.

Network programming is largely a function of economics, not of taste, producing limited but fierce competition in a TV marketplace dominated by only three corporations. ABC, CBS, and NBC compete for TV advertising dollars (network ad revenues alone totaled $4.3 billion in 1979) by selling millions of viewers to sponsors. Like their forerunners in network radio, TV network executives care primarily about the gross numbers. With few exceptions (e.g., soap operas), they are not trying to "target" a particular audience the way local radio stations and specialized magazines do. They want everybody. As a result, prime-time network programming aims for the lowest common denominator, and there is no incentive to tamper with threadbare formulas that happen to work. Paul Klein, a former NBC executive, once described the operative strategy as "Least Objectionable Programming." Every network tries to put something on the air that, at minimum, will not disturb or bore the viewer enough to prompt him to switch to another channel.

This is the bottom line of commercial television, both nationally and among the 612 local network affiliates and 113 independent stations. As long as Americans can choose only a handful of advertiser-supported channels, the TV industry, so it

*It also made possible the creation of "superstations," like R. E. ("Ted") Turner's WTCG-TV (now WTBS) in Atlanta, whose signal, via satellite and cable, now reaches some 5 million U.S. homes. Turner's Cable News Network, which began operation in June 1980, likewise relies on satellite transmission.

WHAT CABLE SUBSCRIBERS GET IN ARLINGTON, VA.

2	WMAR-2, Baltimore
3	Public access channel: public interest programming provided by subscribers or by nonprofit organizations (e.g., Red Cross, local hospital)
4	WRC-4, Washington, D.C.
5	WTTG-5, Washington independent station
6	Teletext: UPI news, stocks, business news, top 40 countdown
7	WJLA-7, Washington
8	Teletext: weather, news, sports, *Radio Arlington* audio background
9	WDVM-9, Washington
10	Weather: 24-hour radarscope picture.
11	WBAL-11, Baltimore
12	Turner Broadcasting's 24-hour Cable News Network
13	WJZ-13, Baltimore
14	Entertainment and Sports Programming Network: 24-hour sports channel
15	Teletext: Metrocable program guide
16	Home Box Office: current movies, nightclub acts, concerts, sports specials
17	WTBS, Atlanta superstation: old movies, reruns, Atlanta Braves baseball
18	CINEMAX: foreign films, classic movies, other feature films
19	WOR, New York superstation: old movies, reruns, New York Mets baseball, other regional sports

is said, cannot help but churn out bland programming.

Why are there so few TV channels—and networks? When the FCC was allocating broadcast frequencies during the late 1940s and early '50s, the commissioners decided to intermix VHF (very high frequency) and UHF (ultra high frequency) channels in the same market, even though they knew that UHF broadcasters, of whom there were, at the time, only a handful, would never be able to compete effectively against the 108 already established VHF stations. Not the least of UHF's disad-

20	WDCA-20, Washington independent station
21	Teletext: community bulletin board, classified ads
22 PBS	WAPB-22, Annapolis
23	Cable Satellite Public Affairs (live coverage of U.S. House of Representatives); Black Entertainment Network; Calliope (children's films); USA Network (professional and college sports); "The English Channel" (British programming)
24 PBS	WNVT-53, Goldvein, Va.
25	Teletext: grocery shopping guide
26 PBS	WETA-26, Washington
27	CBN and WTKK, religious channel: Christian Broadcasting Network and Manassas, Va., station. Features Rex Humbard, Oral Roberts, Dr. Jerry Falwell, *PTL Club, The 700 Club*
28	WBFF-45, Baltimore independent station
29-36	School and county government stations

Source: Metrocable, Arlington, Va.

The menu of a typical urban cable television system—Arlington (Va.) Metrocable—suggests that cable has not so much changed TV fare as tripled the size of the portions. Of the 35 available channels depicted above, 6 pick up signals from network stations, 4 from nearby public TV stations, 2 from local independent stations. Two more—WOR and WTBS—are "superstations" featuring a mix of movies, sports, and reruns. The 3 pay cable channels offer movies and sports. The 8 channels set aside by the cable operator for the use of county government and local schools are rarely in use. Arlington Metrocable has 18,000 subscribers, representing one-third of all homes in the area that can be wired for cable.

vantages was that few TV sets could receive UHF signals. (Not until 1964 were manufacturers required to equip all TV sets for UHF.) Yet, the VHF band could accommodate only 12 channels (2 through 13) without encountering signal interference, while UHF could accommodate 70.

The FCC also decided to allocate television frequencies so that stations would serve as local outlets. Typically, no more than three VHF stations were allotted to any one market, a decision based partly on city size but also on the need to avoid interference with neighboring cities' channels. The predictable result of this system, however, was that the three local stations became affiliated with ABC, CBS, or NBC. Independent or educational programming was generally relegated to the few UHF stations that managed to survive.

The emerging alternative to this conventional, advertiser-supported television system is one where the viewer votes his or her programming preference directly, much as consumers of books, magazines, movies, and newspapers make economic decisions on what, if anything, they are willing to spend for specific items. This is the prospect opened up by the new electronic media.

A Choice, or an Echo?

In theory, at least, a pay system of TV distribution creates enormous incentives to produce new types of programming, quite apart from its enormous number of available channels. Where a network needs an audience of at least 30 million for a "successful" program in terms of ratings, pay TV can turn a profit with an audience of 1 or 2 million. This is because the networks are essentially feeding sparrows by feeding horses; programs are paid for by advertising, with ad revenues depending on the size of the audience. By contrast, cable viewers pay for programming directly. A cable company can also charge interested customers a premium for certain "specials." Ballet, plays, symphonies, exotic sports, quality children's programming, soap operas for old people, in-depth news coverage—each of these theoretically makes economic sense when aimed at a specific audience willing to pay for it.* "We are going to isolate pockets of fanatics," one cable executive told the *Washington Journalism Review*, "and build a business on them."

Cable operators concede that, so far, pay cable programming has consisted almost entirely of movies and sports. That is what viewers have been most willing to pay for. Cable owners have been experimenting with other types of programming, including original productions shown exclusively to subscribers. Ted Turner's 24-hour Cable News Network, which feeds to 309 cable systems nationwide, is one example. Home Box Office produced the widely acclaimed series *Time Was*, a look at past decades hosted by Dick Cavett. Showtime has aired numerous vari-

*Whether there is a large enough audience to support "quality" cable programming will soon be known with the debut of two new pay cable networks—Bravo (a joint venture of several cable companies), in December 1980, and CBS Cable (a subsidiary of CBS Inc.), due later this year. Both promise cultural programming exclusively (e.g., dance, theater, music).

ety specials and a sitcom called *Bizarre.* Being able to bring 80 channels into, say, Pittsburgh, will be a Pyrrhic victory for viewers if only a handful of channels actually carry marginally different programs, or if what the active channels show amounts to a pale imitation of network output. Cable TV's record to date is discouraging.

Network executives work that point into every discussion of alternative TV technology. "I truly wish that there was an infinite quantity of good programming available but there isn't," observes Gene Jankowski, president of CBS/Broadcast Group. "Adding signals to the marketplace will not be adding choice."

The initial response of the broadcast industry to the new video technologies, throughout the 1960s and most of the '70s, was to lobby (successfully) for federal protection in the form of restrictive FCC rules, such as a limit on how many distant signals a cable system could carry. (Pay cable owners were also prohibited from airing feature films more than 3 but less than 10 years old, and from televising certain sporting events, such as the Super Bowl.) Traditional broadcasters argued that the networks were running, in effect, a kind of charity enterprise, bringing the great wide world—documentaries, space shots, inaugurations, the World Series—free of charge into the homes of all Americans, regardless of income; cable operators, they contended, would siphon off all of the good programming into the homes of the affluent.

Hedging Bets

The broadcast industry's preferential treatment began to crumble in 1977, when the U.S. Court of Appeals in Washington, D.C., in the case of *Home Box Office, Inc.* v. *FCC* overturned most of the FCC's restrictions on what *pay* cable entrepreneurs could offer their customers. The court cited a breach of the First Amendment rights of producers, cablecasters, and viewers. Then, last July, prodded by chairman Charles D. Ferris, an aggressive proponent of deregulation, the FCC voted 4 to 3 to scrap all but two of the restrictions on *basic* cable programming.*

*Cable owners, like broadcasters, do not dislike *all* forms of regulation. Cable has its own government-granted benefits. For example, under the Copyright Act of 1976, cable systems are allowed to pick up non-network distant broadcast signals—of *The Dick Van Dyke Show,* say, or classic films like *The African Queen*—and retransmit them to their own viewers at a low, government-established rate. These royalties are collected by the federal Copyright Royalty Tribunal, which then distributes the sum among the companies originally responsible for the programs—movie studios, TV syndicators, sports clubs, local broadcasters, and public television. "The vast majority of cable operators," complains Jack Valenti, president of the Motion Picture Association of America, "pay more for postage stamps than for their programs."

Now that their oligopoly has been weakened, the three TV networks are beginning to adopt a less alarmist tone, making adjustments and exuding optimism. The Corporate Planning Department of NBC, for example, now projects that the new technologies will simply increase the total number of hours each American household spends watching television, and that commercial broadcasting's share of that audience will not decline. Herbert Schlosser, formerly president of NBC and now in charge of developing and marketing videodiscs for RCA, NBC's parent company, generally agrees with these projections: "The reservoir of hours of TV watching is so huge—over 2,300 hours per home per year—that even with some audience loss commercial broadcasting will remain a strong and vital business and will continue to be a necessity to advertisers."

Yet the broadcasters are hedging their bets. In recent years, particularly at the local level, they have been heavily involved in purchasing cable systems. (More than 30 percent of all cable systems are now owned by companies with broadcast interests.) During the past year, all three networks set up "video enterprise" divisions to produce and distribute programming for pay cable, subscription television, and videodiscs.*

A Long Way from Camelot

For their part, advertisers are taking a wait-and-see attitude toward the new technologies, with an eye on the short-term data (which reveal that, on occasion, pay programming can get Nielsen ratings comparable to those of top network shows) and the long-term projections (which show cable in 40 to 50 percent of U.S. homes by the end of the decade). If such trends continue, advertisers may begin diverting some of the their broadcast television expenditures to cable.

Some conventional broadcasters are worried, although few will express their concern publicly. Others profess nonchalance. The competition, after all, owes much to its ability to offer a service that, as currently set up, is uncensored and largely free of commercials. More important, they say, only the networks can offer advertisers tens of millions of viewers at a time. Even if Americans in large numbers began switching to the alterna-

*Videodiscs and videocassettes are wild cards: No one knows how successful they will be, or how they will change the TV industry. Discs are the video equivalents of phonograph records; when placed on a video disc player, they produce sound and pictures on the home TV screen. Cassettes perform the same function using videotape; they may be purchased blank (for home recording of TV shows) or prerecorded. Currently, the largest segment of the prerecorded cassette market is for pornography.

tives, they would be dispersed among scores of different channels. And, broadcasters maintain, the networks would still deliver the biggest single audience blocs.

The advertisers' reluctance to move quickly into the new TV systems is understandable. The television industry is currently in a state of flux. No one can predict what its nature and dimensions will be 20 years from now. The possibilities seem endless.

Perhaps the status quo will *remain* the status quo, with the airwaves still dominated by ABC, CBS, and NBC, and cable and pay television cast in the role of lucrative ventures on the fringe. It may turn out that the new technologies are not competing against the networks so much as against the film and record industries. Broadcasters may successfully pre-empt competition by continuing to buy into cable companies and to invest heavily in programming for cable and home video, in effect playing both ends against the middle. Or the new cable networks may become so successful that they begin to attract national advertising—and gradually turn into replicas of the kinds of TV they once sought to replace.

It is difficult not to invent dispiriting scenarios, given commercial television's own history—and the overall performance to date of the alternatives. The new electronic media will probably make money. They may, in the end, add a bit to the general quality of American TV; they may give us, here and there, a few more real choices than we had before. And videodiscs and videocassettes will almost certainly allow most Americans to schedule their TV viewing around their leisure time, rather than vice versa.

But it is hard to believe that the new video technologies will bring us much closer to the lofty ideal expressed by E. B. White. "I think television should be the visual counterpart of the literary essay," he wrote in 1966. It "should arouse our dreams, satisfy our hunger for beauty, take us on journeys, enable us to participate in events, present great drama and music, explore the sea and the sky and the woods and the hills. It should be our Lyceum, our Chautauqua, our Minsky's, and our Camelot."

A QUESTION OF IMPACT

by Joel Swerdlow

Historian Daniel Boorstin, the Librarian of Congress, has called television "the next great crisis in human consciousness." Such crises attend the birth of every new form of mass communication. Even the written word did not emerge unchallenged. Plato warned that disciples of writing would "generally know nothing; they will be tiresome company, having the shadow of wisdom without the reality." The printing press, too, had its critics. It bred heresy and dissent, some said, and gave common folk dangerous ideas.

Now television is under attack. Will its accusers someday seem quaint? Or is the "visual" culture of television a revolution to be feared and fought?

That some kind of revolution has occurred cannot be denied. Ninety-eight percent of all U.S. homes have at least one TV set; it is turned on for an average of more than six hours a day, although it may not always command the viewers' undivided attention. No other leisure activity has ever consumed such a big chunk of Americans' time. Watching television is what Americans do more than anything but work (if employed) and sleep. Appropriately enough, brain wave studies indicate that children and adults alike lapse into a "predominantly alpha wave state" (which usually precedes sleep) after only 30 seconds of television viewing.[1]

TV has also eclipsed rival media. In 1979, total revenues in the United States from all book sales were $6.3 billion; for commercial television, advertising revenues alone totaled $10.2 billion. Television reshaped radio content and listening patterns and cut per capita movie attendance from 29 in 1946 to 5 in 1979. It was an accessory to the deaths of big-city afternoon newspapers.

But what is television's impact on *people?* How does it affect the way we view the world, our neighbors, ourselves? How does it change our behavior?

Firm answers are hard to come by. Because television is so pervasive, researchers find it virtually impossible to form control groups for purposes of comparison. Anyone growing up without television is, by definition, "abnormal." Today, scholars seeking to examine the effect of TV on learning, spending habits, voting patterns, perceptions, and a wide variety of behavior must generally be content to contrast "heavy viewers" with "light viewers" rather than viewers with nonviewers. This approach carries certain risks, because the heaviest TV viewers tend to be people at the lower end of the income/education ladder, a characteristic that may in itself account for certain of the behavioral traits commonly associated with heavy television watching.

Even so, research into the behavioral implications of television—using statistical modeling, content analysis, galvanic skin tests, brain wave studies, and other techniques—has become a glamor industry in academe. While the hundreds of published studies tend to shy from making explicit the relationship of cause to effect, most of the findings are strongly suggestive. The literature is virtually devoid of arguments that television is either powerless or harmless.

Learning: The difficulties in America's classrooms obviously stem from many causes. *Why Johnny Can't Read* appeared in 1955, well before many U.S. homes had TV sets. Family instability, lack of discipline at home and in the schools, and educational fads have all taken their toll. But not even the most sympathetic analyst absolves TV of a major share of the blame.

Drawing by Weber. © 1978 The New Yorker Magazine, Inc.

"This is my husband, Taylor," went the caption of this 1978 Weber cartoon. "His brain has turned to mush from too much television."

Ever since the first members of the TV generation began applying to colleges during the early 1960s, Scholastic Aptitude Test (SAT) scores have shown a steady decline. ("Television," the authors of a 1977 SAT study concluded, "has become a surrogate parent, a substitute teacher.") Teachers complain about their pupils' passivity, short attention spans, and lack of imagination, characteristics attributable, at least in part, to TV viewing. Many young teachers, themselves raised on television, now arrive in the classroom without basic skills. TV has apparently fostered a new growth industry: the teaching of "remedial" reading and writing in the nation's colleges.

By about age 15, the average American child has spent more time (about 20,000 hours) in front of a television than in the classroom—or doing homework. During the school year, approximately 1.5 million children aged 2 to 11 are still watching TV at midnight on weekdays. Researchers generally agree that heavy viewers comprehend less of what they read than do light viewers. They also confirm that, other things being equal, the more television a child watches, the worse he does in school.[2] (The sole exception may be students with low IQs.) "Mentally gifted" grammar-school students show a marked drop in creative abilities after just three weeks of intense television viewing. In a real sense, then, TV watching acts as a major "drag" on learning in America.

In the classroom itself, some types of learning can be helped by TV. Educators seem to agree that certain televised lessons can eliminate the need for repetitious reading drills, can help improve reading skills, and can be useful in teaching vocabulary.[3] The use of scripts from popular TV shows as a teaching tool—a controversial practice known as "scripting"—has reportedly raised average reading levels in some Philadelphia schools by some 20 percent, although it may also, in the process, have legitimized the misinformation inherent in most TV programs.

The most publicized efforts to tap the educational potential of TV remain public television's *Sesame Street* and similar programs that provide instruction in reading and, it is claimed,

Joel Swerdlow, 34, writes nationally syndicated newspaper articles about television. Born in Washington, D.C., he holds a B.A. from Syracuse University (1968) and a Ph.D. in American politics from Cornell (1974). His books include Remote Control: Television and the Manipulation of American Life *(1978, with Frank Mankiewicz) and the novel* Code Z *(1979). He is the author of the "Broadcasting" entry in the forthcoming edition of the* Encyclopedia International.

help preschoolers learn "how to learn." Critics counter that parents are being tricked, that teaching children to read or count at so early an age has no lasting effect—except, perhaps, to get the child "hooked" on television. Educator John Holt worries that *Sesame Street* teaches children that a "right answer" always exists. Other researchers contend that *Sesame Street* has no demonstrable impact upon later school performance.[4] And, while second-graders in the lower half of their classes *do* benefit from another program, *The Electric Company,* two years of viewing do not seem to help more than one.*

Setting the Agenda

Much of the problem obviously lies with parents who regard TV as a convenient baby sitter or as a child's afterschool sedative; most parents, surveys show, have no idea how much television their children actually watch. Yet the high number of hours the average child (or teen-ager) devotes to watching TV means that an equivalent amount of time at home is *not* being given over to reading, hobbies, or socializing. The diversion of time from reading is critical. In a complex, technological society, reading becomes more rather than less important.

Politics: Television has transformed American politics, but its influence is like a *pointilist* painting: easy to trace from a distance, but less so the closer one gets. Television intrudes upon the political process chiefly through news broadcasts and paid political advertisements. Yet, to a certain degree, television is also an important force in U.S. electoral politics simply because it is *believed* to be important.

Researchers agree that TV's chief political role is as an "agenda-setter": It does not so much tell people what to think as it tells them what to think *about.* Studies of Watergate and the Vietnam War, for example, indicate that television identified each as a major problem long before the public did. This in no way makes television unique. Newspapers play the same role, and did so long before television existed. What makes television distinctive is its glamor and its reach. As the chief source of

*Whatever the impact of specific programs, some scholars speculate that by relying on the information coded in images, TV watchers may be developing hitherto unused portions of their brains. Harvard University researchers in 1979 showed similar groups of children the same story—one version on film with narration, and the other in a picture book. In response to questions afterward, both groups gave generally the same answers. Yet the film-viewers based their answers on visual content, while the readers relied more upon verbatim repetitions of the text. One thought process was neither more correct nor more desirable; they were merely different. Other research suggests that the average IQ may be rising because of children's increased capacity to handle spatial, visual problems.

news for most Americans, it has enhanced—and exaggerated—the power of the Fourth Estate.*

Television is far from all-powerful, and its exact effect on voter behavior and opinion has yet to be identified. While political commercials *do* inform voters of the issues, they seem to have "no effect on voters' images of candidates," according to the one in-depth study of such advertisements.[5] There is no demonstrable correlation between TV expenditures and election results, except when the race is close and one candidate heavily outspends the other.

Realism vs. Reality

Modest though its influence may be on voters, TV affects American political campaigns through its influence on candidates' behavior. Candidates now rely on media consultants as they fly from market to market, in search of free air time on the local or national evening news. During the 1980 general election, Jimmy Carter and Ronald Reagan each spent about 60 percent of their $29.4 million campaign treasuries on advertising, and most of that went into television.

Why do they do it? Part of the reason is probably historical. Since 1952, when television made its political debut, there have been a handful of instances where TV apparently proved decisive. Richard Nixon's self-saving "Checkers" speech in 1952 and the Kennedy-Nixon debates in 1960 are usually cited as examples.† Television commercials have also proved to be an effective surrogate if one does not wish to get out on the campaign trail, as Jimmy Carter discovered during the 1980 primaries. Furthermore, television commercials, as California Governor Jerry Brown has observed, help "to convince people of the reality" of a campaign. In 1977, Madison, Wisconsin, Mayor Paul

*This can have international consequences. The vision of global TV publicity is a temptation to some terrorists and a tool in the hands of others. The 1979–80 story of the Americans taken hostage in Iran is a case in point. In Tehran, the colorful Islamic "student" militants adroitly exploited the American news teams' hunger for "good film." In the United States, the hostages' families and man-in-the-street reactions added a home-town angle. The TV news organizations saw the hostage story as a continuing melodrama and gave it almost unprecedented amounts of air time. On one occasion, the *CBS Evening News* devoted all but 3 minutes of its regular 22-minute broadcast to the crisis. President Carter, some analysts contend, felt impelled by the "saturation" TV coverage to react in dramatic ways—e.g., leaving the campaign trail, ordering a Navy task force to the Indian Ocean. He, too, discovered that the crisis could be exploited, as his poll ratings went up. The distinction between what was important and what was just theater was blurred from the day the American diplomats were taken hostage.

†It is interesting to note that people who heard the debates only on radio generally believed that Nixon had "won," while those who saw Nixon's poor make-up and Kennedy's relaxed manner on television inclined to JFK.

Soglin and his advisers insisted on airing TV commercials during his re-election campaign even though the candidate didn't need to. The reasoning: Not running commercials would erode morale among campaign workers and lead voters to think Soglin was unable to raise money.

"The President Said Today . . ."

The rise of televised politics has also coincided with—and contributed to—weakening party organization. Up to a point, politicians no longer need party backing to reach voters; with money for media time, they can blanket the territory. Only television allows a candidate to become a household face in, say, 35 states in a matter of three months. Presidential primaries themselves are the handmaidens of television, if not its creations. The national party conventions are likewise dependent on—and adapted to—network television; the delegates, outnumbered by network employees, complain that they don't know what's going on unless they have a television set to watch.

As often as not, there is nothing very important happening on the convention floor or out on the hustings, but it is worth any correspondent's job to say so. TV news shows compete for viewers just like other television programs. Hence, the correspondents' emphasis on campaign strategies and personalities over substance, on tactical errors and slips of the tongue. A study of CBS News's 1980 campaign coverage, for example, found it to be "extensive, nonpartisan, objective, and superficial."[6] Writing in 1893, Britain's Lord Bryce blamed political party leaders for the absence of "great" Presidents in America. Today, it is popular to blame the poor quality of broadcast journalism.

Campaigns aside, television has indisputably helped to center power in Washington and in the Presidency. Only the President may command free network air time almost at will—for press conferences, for major addresses, for brief announcements during a time of crisis, or for such special events as the signing of the Egypt-Israel peace treaty in 1979. He is the focus of attention on the evening news: There is *always* a story filmed on the White House lawn. Political scientist Michael Cronin points out that television "serves to amplify the President's claim to be the only representative of all the people." Yet the advent of TV has not eliminated the long-term attrition in the opinion polls that all modern Presidents have experienced.

In sum, then, television's greatest impact on politics seems to be indirect. It has helped to reshape the process of American politics—and the way politicians speak and act—because Presidents and politicians (and TV correspondents) *think* TV is important. Lyndon Johnson was extremely sensitive to TV news; he and his aides were shaken when CBS anchorman Walter Cronkite publicly turned against the administration's Vietnam policy in early 1968. Yet there is no evidence that the impact of TV news, as both its critics and champions contend, turned the American people against the Vietnam War. And, despite Richard Nixon's appreciation of television's supposed power—returning from Peking in 1972, he sat in Air Force One for nine hours in Anchorage, Alaska, so that he could triumpantly arrive home in prime time—there is no evidence that television pushed him out of office in 1974.

Parables and the Pill

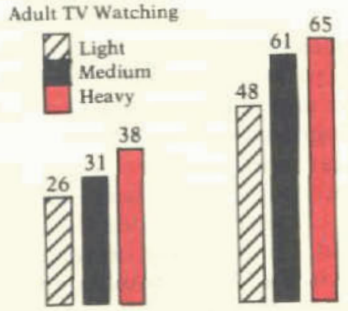
Behavior: Television affects all kinds of human behavior, but no aspect has been studied more than violence. (On TV, violent incidents occur, on average, 5 times per hour during prime time and 18 times per hour during weekend daytime children's shows.) The evidence here is compelling: Children who see a great deal of violence on television are more likely than children who see less to engage in aggressive play, to accept force as a problem-solver, to fear becoming a victim of violence, and to believe that an exaggerated proportion of the society is employed in law enforcement.[7] These conclusions remain true when held constant for IQ, social status, economic level, and other variables. The broadcast industry has itself invested millions of dollars in such research but, perhaps predictably, comes up with, at best, a "not proven." An exception was a six-year CBS study conducted in Great Britain during the 1970s that concluded that young men who are heavy TV viewers are 50 percent more likely to commit violent crimes.[8]

Television, of course, may also teach "pro-social" lessons. Significantly, a TV protagonist displaying positive behavior has more of an impact upon children's subsequent play than does a character encouraging violence. Michael Landon, star and executive director of *Little House on the Prairie,* admits to writing parables into his show in order to "teach America's families and children." Teaching and learning, of course, are not the same thing; it is a matter of scholarly conjecture whether children "generalize" the specific beneficial lessons they have learned—that is, whether it occurs to children to apply such lessons in real-life situations that may vary, in their details, from the episode portrayed on television.[9]

THE WORLD ACCORDING TO TELEVISION

Television presents a peculiar picture of social reality, one that is as credible to many viewers as it is inaccurate. Owing to a high incidence of violent episodes on TV, heavy viewers tend to overestimate the prevalence of violent crime in U.S. society and are less trusting (right) of other people than are light viewers. Occupational breakdowns are markedly skewed on prime-time TV (below right), where 1 out of every 8 persons is a policeman (versus 1 out of 222 in real life), but only 1 out of 10 is a blue-collar worker (versus 1 out of 2 in the U.S. work force). Similarly, TV characters (below, left) tend to be in the prime of life, neither too young nor too old. Perhaps not surprisingly, studies show that heavy viewers under the age of 30 tend to believe, contrary to fact, that people do not live as long as they used to.

ATTITUDES



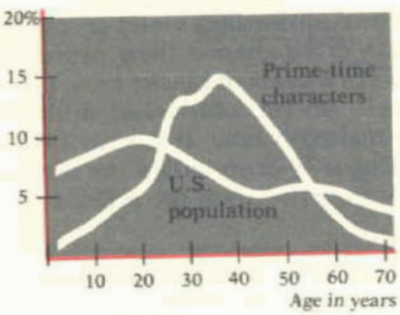
% answering *yes* to question: Do you think most people would try to take advantage of you if they got a chance?

% answering *yes* to question: Would you say you can't be too careful in dealing with people?

EMPLOYMENT

	Prime-time (% of all characters)	U.S. (% of all workers)
Policemen	12.8	.45
Private eyes	1.2	.02
Blue-collar workers	9.9	49.67
Doctors	3.0	.35
Lawyers	1.6	.33
Judges	0.5	.02

AGE DISTRIBUTION



Source: George Gerbner and Nancy Signorielli, *Women and Minorities in Television Drama*, 1979; George Gerbner, "Television's Influence on Values and Behavior," 1978.

Television provides the American child's most easily accessible—if not necessarily most accurate—data on sex. Indeed, sex has become television's chief dramatic device. Recent tabulations document a rapid increase in TV's sexual innuendoes and in TV portrayals of prostitution, incest, rape, infidelity, and other deviations from the so-called old morality. In 1978, references to premarital or extramarital sex occurred in 43 percent of all prime-time shows (versus 21 percent in 1977); a mixture of sex and violence could be found in 10 percent of all prime-time programs (versus zero in 1977).[10] On prime-time shows, sexual intercourse is seven times more likely to occur between unmarried couples than between husband and wife.

It seems reasonable to suppose that all of this has an impact, but how, and on whom? One study indicates a relationship between TV and unwanted teen-age pregnancies: Heavy viewers are more likely to believe that their favorite television heroine would not use birth control.[11] Another survey concludes that television raises adolescents' expectations of "what sex should be like." Heavy viewers seem to marry earlier and have more children. Such data, however, remain tentative and fragmentary.

We are on somewhat firmer ground with regard to "sexism." The more television most people watch, media scholar George Gerbner concludes, the more sexist their views are.[12] Other studies find that "children's perspectives of males and females generally correspond to the stereotypes found on TV."* Heavy viewers are more likely to prefer sexually stereotyped toys and activities.[13] On the positive side, girls who are shown women in "men's roles" on TV are more likely than other girls to endorse those roles as feasible and desirable.

Kicking the Habit

What about race? From sit-ins to antibusing violence, civil-rights activists and their foes have often shaped their protests with television in mind. Fictional portrayals of blacks have presumably had some impact as well. An estimated 130 million Americans watched ABC's up-from-slavery epic, *Roots*, in 1977. *New York Times* editorial writer Roger Wilkins called the series "the most significant civil rights event since the Selma-to-Montgomery march in 1965."

*Women on television are generally attractive, under age 40, use sexual guile, and hold primarily "traditional" female occupations. Women are warm, submissive, timid, and emotional—men are ambitious, intellectual, violent, and logical. In authoritative speaking roles, particularly in commercials, men outnumber women by more than three to one.

Yet precisely what effect the portrayal of blacks in *Roots* and other network offerings has had on white TV audiences is difficult to pin down. Young children, especially suburban whites who may have little contact with blacks, believe television *comedies* faithfully depict other races even when this contradicts what their parents have taught them.* Researchers also conclude that many children form stereotypical opinions about other groups during preschool years when they are most susceptible to TV's influence. Yet these children do not seem to believe that a television character's race is important.

One other behavioral note: Families that are asked by researchers to forego television for prolonged periods report that their lives are much improved, but nearly all resume watching as soon as the experiment ends. Some pyschiatrists now regard heavy TV viewing as an addiction.

As Advertised on TV

Selling: Television affects behavior on a crucial front—consumption. This is the economic basis of TV's existence. Advertising's share of the Gross National Product has held more or less steady for the past three decades at around 2 percent, but television's share of total ad expenditures—20.5 percent, or $10.2 billion in 1979—has grown year by year.

Businesses do not spend those billions for nothing. Long-distance telephone billings across the nation, for example, rose by 14 percent in 1979 (to $1.3 billion) following introduction of AT&T's "reach out and touch someone" campaign. Television commercials may create a demand for hitherto nonexistent products (e.g., feminine deodorant sprays) and permit manufacturers to by-pass retailers and appeal directly to consumers. Even print ads now make increasing use of the logo "as advertised on TV" as if to lend a certain legitimacy, even reality, to the product.†

Television advertisements do not *guarantee* sales success, however, and TV is not necessary for some commodities. Seventy percent of all cigarette advertising was on broadcast media in 1970 when the congressional ban went into effect, yet ciga-

*Findings about television and blacks also generally hold true for Hispanics, Native Americans, and other groups.

†The power of television is felt most acutely during childhood. The average child sees about 25,000 commercials a year. Studies show that the younger children are, the more likely they are to prefer playing with toys advertised on TV than with friends, and the more likely they are to ask parents to make a specific purchase. When asked "the kinds of goods you call snacks," 78 percent of the children in one survey named TV-advertised junk food.

TV NEWS: THAT'S THE WAY IT IS

When Vice President Spiro Agnew assailed the "liberal" TV networks in 1969 for their distortions of news, he had some truth on his side. But he missed the point. The strongest bias was, and is, commercial, not political. To survive, the news executives must get high audience ratings. Hence, they serve up news-as-entertainment: melodrama, pathos, violence, conflict, celebrity.

As a transmitter of "facts," television news is inherently inefficient, compared to print. A transcript of the typical 22-minute bits-and-pieces evening news program equals in wordage about two columns of the *New York Times*; any intelligent reader can take in—and ponder—more information in 22 minutes than the networks could provide in twice that time. Yet 75 percent of Americans report that they get most of their news from TV, a trend that even CBS's Walter Cronkite thinks is "ominous."

TV news's appeal, studies indicate, lies partly in its convenience; seeing is easier than reading. To grip audiences, one NBC man noted, the producers, film editors, and correspondents "make little movies": of Mt. St. Helens erupting, Iranian demonstrators shouting, John Anderson gesturing, Iraqi soldiers shooting. The film

rette consumption in America is now at an all-time high. The tobacco industry merely increased its advertising budget and pumped the money into other media.*

Perceptions: For innumerable TV viewers, "real life" is not as exciting or dramatic as it is "supposed" to be, and as it is on television. This aspect of television's impact is perhaps the most pervasive and least documented. It penetrates psychological rhythms in a way that the viewers involved may have difficulty recognizing—largely because they are not on guard against it. Novelists, such as Jerzy Kosinski, have lately begun exploring the phenomenon. (A *Journal of the American Medical Association* editorial on insanity recommended Kosinski's *Being There* as a "supplement to scientific study.") Truman Capote's *Music for Chameleons* is written in part as a screenplay, while practitioners of the "new journalism" record their impressions in the manner of roving cameras.

Television projects an aura of authenticity. A significant number of people, for example, believe that what they see on TV is real. In 1967, the National Commission on the Causes and Pre-

*Tobacco executives resisted the broadcast ban only half-heartedly because earlier federal rulings guaranteed air time for antismoking TV commercials. Surveys indicated that these "counter-commercials" were hazardous to healthy cigarette sales.

snippet itself is often vivid but ambiguous; the TV reporter's brief comments, sometimes highly speculative, supply a simple theme and story line. Critic Michael Arlen once wrote, "The main thing is not the [filmed] event, and the need to describe it, but to describe it in such a way that [the viewers] will feel the way you want them to feel about it."

Thus, news is, as ABC producer Av Westin observed, a special branch of television "show biz." The three major network news shows in 1979–80 together averaged an audience of 30 million every night. That audience is disproportionately old (41 percent are 55 years of age or older) and female (47 percent of news viewers are *adult* women). Children aged 2 to 11 are far more likely to watch the evening news than are teen-agers. And the TV news audience is fickle. More than half of all U.S. households did not watch these shows even once a month. Of those who did watch, 68 percent saw fewer than six shows a month; only 6 percent watched the news at least four nights a week.

Do major events increase the TV news audience? A little. But the season matters much more. During the summer months, the U.S. network evening news audience is about 35 percent smaller than in winter, no matter what's going on in the world, or what Mr. Cronkite has to say about it.

vention of Violence discovered that 15 percent of middle-class white teen-agers and 40 percent of poor black teen-agers believed that TV programs "tell about life the way it really is." One recent study using a scale of 1 to 9 found that children in the third through sixth grades gave TV families an overall reality score of 5.97, and TV policemen a 6.89. Furthermore, the study concluded, "real life experience with parallel television content did not diminish the perceived reality of television."[14] In other words, TV images tended to be seen as "truer" than first-hand information.

Such distorted views of reality may affect reality itself. Physicians cite the "*Marcus Welby* syndrome"—patients expecting doctors to cure and comfort them quickly and at little cost or inconvenience. Owing to the predominance of police and crime programs on TV, surveys now show that many police officers try to act and look like they're "supposed" to. A recent Rand survey found that much of what real detectives do during a routine investigation—e.g., fingerprinting, lineups, showing mug shots—is usually not employed to capture criminals. Rather, in many cases, such techniques are intended to satisfy public expectations of how police *should* behave.[15]

Television also teaches that the police coerce witnesses, bribe, plant illegal drugs, lock up suspects without filing charges, and otherwise subvert the Constitution. When a tape of such illegal practices was shown to a class of prelaw students at the University of Massachusetts, most failed to understand why it was worthy of note. The author of this study, Ethan Katsh, a professor of legal studies, further points out that law is based upon abstract principles that on TV "are replaced by a personification of law. The focus of television is invariably on the visual elements of law such as courts, judges, police, lawyers, and criminals. These elements, which are a part of the law, become identified as being all of law."[16]

Believing that their TV images affect both social status and political power, organizations variously representing Vietnam veterans, women, homosexuals, senior citizens, manual workers, racial minorities, the handicapped, and the mentally ill have started to gather proof. Surveys show, for example, that the more people, especially young people, watch television, the more they tend to perceive old people in generally negative and unfavorable terms. A Machinists Union study laments that on prime-time television shows, "prostitutes outnumber machinists . . . and unions are almost invisible." Such imbalances, the Machinists argue, "devalue and harm occupations of crucial need to the economy."[17]

To sum up, there is no longer much doubt that television may engender or reinforce certain perceptions. The big unanswered question is: How strongly do various TV audiences "offset" what they see on the TV screen with perceptions and values drawn from other sources—personal experience, parents, friends, reading, church, and school?

Time for Self-Control

Television, as a technology, is neither good or bad. It is a fact of life, and no Luddites will ever bring back pre-TV days. Indeed, with the advent of cable, satellite transmission, and home video equipment, Americans will probably be watching more television in the years ahead than ever before.

Yet, as Daniel Boorstin correctly warns, our uncritical embrace of television has created a crisis. Even the imprecise studies now available suggest TV's far-reaching impact, be it harmful or (occasionally) benign. In theory, public opinion could tilt television programs toward more constructive ends; the TV industry, after all, is a captive of audience taste. But even that would hardly lessen the sheer amount of time many people spend passively in front of the TV set. And there is no evidence, in any event, that Americans are disposed to rise up, en masse, against those responsible for what appears on the air.

This is perhaps the most alarming aspect of television—not the medium itself, but the fact that most Americans refuse to acknowledge its influence, or to take steps to leash its content, or at the very least to take control over their own viewing habits and those of their children.

NOTES

1. Barry Siegel, "TV's Effect: From Alpha to Z-z-z," *Los Angeles Times*, March 11, 1979.
2. George Comstock et al., *Television and Human Behavior*, New York: Columbia, 1978.
3. Richard T. Hezel, "Public Broadcasting: Can It Teach?" *Journal of Communication*, Summer 1980.
4. Edith Spiegal, "Yes, *Sesame Street* Has Its Detractors," *New York Times*, Aug. 5, 1979.
5. Thomas E. Patterson and Robert McClure, *The Unseeing Eye*, New York: Putnam's, 1976.
6. Michael Robinson, "The Media at Mid-Year: A Bad Year for McLuhanites," *Public Opinion*, June-July, 1980.
7. George A. Comstock and Eli A. Rubenstein, eds., *Television and Social Behavior: Technical Reports to the Surgeon General's Scientific Advisory Committee on Television and Social Behavior*, Rockville, Md.: National Institute of Mental Health, 1972.
8. W. A. Belson, "Television Violence and the Adolescent Boy," paper presented to the British Association for the Advancement of Science, Sept. 6, 1977.
9. F. L. Paulson, "Teaching Cooperation on Television," *Audio-Visual Communications Review*, vol. 22, no. 3, 1974.
10. George Gerbner et al., "Media and the Family," White House Conference on Families, 1980.
11. "TV Viewers: Learning and Media Research," Southwest Educational Development Laboratory, Feb., 1980.
12. George Gerbner and Nancy Signorielli, *Women and Minorities in Television Drama*, Philadelphia, Pa.: Univ. of Pa., 1979.
13. Paul E. McGhee, "Television as a Source of Learning Sex Role Stereotypes," paper presented to the Society for Research in Child Development, 1975.
14. Bradley S. Greenberg and Byron Reeves, "Children and the Perceived Reality of Television," *Journal of Social Issues*, no. 32, 1976.
15. Jan M. Chaiken, *The Criminal Investigation Process*, Santa Monica, Calif.: Rand Corporation, 1975.
16. Ethan Katsh, "Is Television Anti-Law: An Inquiry into the Relationship between Law and Media," unpublished manuscript, 1980.
17. *Television Entertainment Report*, Washington, D.C.: International Association of Machinists and Aerospace Workers, 1980.

The audience data on page 97 in the "TV News" box was compiled by Lawrence W. Lichty.

BACKGROUND BOOKS

TELEVISION IN AMERICA

Television has replaced the popular novel—and the movies—as America's chief medium of entertainment, and scores of scholars and journalists have attempted to explain this phenomenon. The Library of Congress card catalog contains entries for more than 6,000 works on television. Yet, among them, truly illuminating studies are few.

The best one-volume history is **Tube of Plenty: The Evolution of American Television** (Oxford, 1975, cloth; 1977, paper) by Erik Barnouw, a former Columbia professor of dramatic arts, television, and film. His well-written account is a condensation of his three-volume *A History of Broadcasting in the United States* (1966–70). In addition to providing crisp analyses of TV's evolution and of individual programs, Barnouw presents brief sketches of television's tycoons, including NBC's David Sarnoff and CBS's William S. Paley.

In **David Sarnoff: A Biography** (Harper, 1966), Eugene Lyons describes the dramatic incident that thrust the young Sarnoff into national prominence. On the night of April 14, 1912, while on duty as a wireless operator in New York City, Sarnoff received a startling message from the S.S. *Olympic:* "S.S. *Titanic* ran into iceberg. Sinking fast." To ease communications with ships near the scene, President William Howard Taft shut down all other radio stations. For three days, Sarnoff stayed glued to his earphones and relayed news of the tragedy to the press. An overnight celebrity, he later formed the NBC network to provide a market for radios—and later, of course, got into TV.

In 1948, William S. Paley, principal owner of CBS, brightened his network's prospects by raiding rival NBC of some of its biggest TV stars—Jack Benny, Red Skelton, and Frank Sinatra. Paley, who also pioneered in radio news with Edward R. Murrow, William Shirer, H. V. Kaltenborn, and Eric Sevareid, gives an often veiled account of his rise in **As It Happened: A Memoir** (Doubleday, 1979).

Paley touted CBS-TV as "the largest advertising medium in the world." And, indeed, TV's relationship with business is the medium's Big Story. For a complete account of that symbiosis, readers can again turn to Erik Barnouw.

In **The Sponsor: Notes on a Modern Potentate** (Oxford, 1978, cloth; 1979, paper), Barnouw writes that the real message of TV is a commercial one; the result is "a dramaturgy reflecting the demographics of a supermarket."

Most of the TV-viewing public claims to dislike commercials, but there is little doubt among advertisers that they succeed in selling products. As the head of the "Creative Group" that produced AT&T's campaign to promote long-distance telephoning has remarked, "In thirty seconds, everybody notices *everything.*" A funny, behind-the-scenes look at the making of those brief "spots" for the telephone company is **Thirty Seconds** (Farrar, 1980) by *New Yorker* television critic Michael J. Arlen.

For six months in 1979, Arlen, the author of two excellent collections of essays on TV—**Living-Room War** (Viking, 1969) and **The View from Highway 1** (Farrar, 1976, cloth; Ballantine, 1977, paper)—followed the commercial-makers around. The result is a deadpan, camera-eye view of the people involved in an exotic process. "Basically," says an ad man, "we are targeting people who have already experienced making a long-distance phone call." The commercial's music composer admits that "Reach out and touch someone" was a "*good* line" but, he adds, "it was genius . . . that thought to extend the basic concept to 'Reach out, *reach out*, and touch someone.'"

How television has "touched" the public, or affected the way people behave, is a growing target of scholarly effort. An extensive roundup of 25 years of such research is found in **Television and Human Behavior** (Columbia, 1978, cloth & paper) by George Comstock et al. Not surprisingly, there are few firm answers.

Although no hard evidence links TV news treatment and shifts in public opinion, network news "bias" has long excited critics' suspicions. Edward J. Epstein's **News from Nowhere: Television and the News** (Random, 1973, cloth; Viking, 1974, paper), is a pioneering inside look at ABC, CBS, and NBC. Epstein clearly shows the preponderant (and nonideological) influence on TV journalism of budgets, competition for ratings, and keep-it-simple themes. The frustrations of TV newspeople bulk larger than their flaws in Marvin Barrett and Zachary Sklar's **The Eye of the Storm** (Lippincott & Crowell, 1980, cloth & paper), the latest Alfred I. duPont–Columbia University survey of broadcast journalism. More pointed is editor Paul Weaver's critique in **Television as a Social Force: New Approaches to TV Criticism** (Praeger, 1975, cloth & paper). The producers of TV news programs, he writes, seek to convey an impression of "authority and omniscience"; the final product is peculiarly unreliable because it tells the viewer more than its creators know or can know.

Reference books dealing with television abound. Most intriguing is critic Cobbett S. Steinberg's **TV Facts** (Facts on File, 1980). Its lists of top-rated TV shows, however, can be as dispiriting as the best-seller book lists in Sunday newspapers. The three highest-rated TV series for 1978–79 were *Three's Company, Laverne and Shirley,* and *Mork and Mindy. 60 Minutes* tied for sixth place. The longest running prime-time TV series is *Disney's Wonderful World.* Since September 1954—under five different titles and on two networks—the show, perhaps appropriately for television, has offered the public a tour of Fantasyland.

EDITOR'S NOTE: *Lawrence W. Lichty and Stuart N. Brotman suggested many of the titles mentioned in this essay.*