

THE RIVALRY BETWEEN THE TRADITIONAL MEDIA,  
BOOKS, FILM, AND THE ELECTRONIC MEDIA

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## I. The Setting

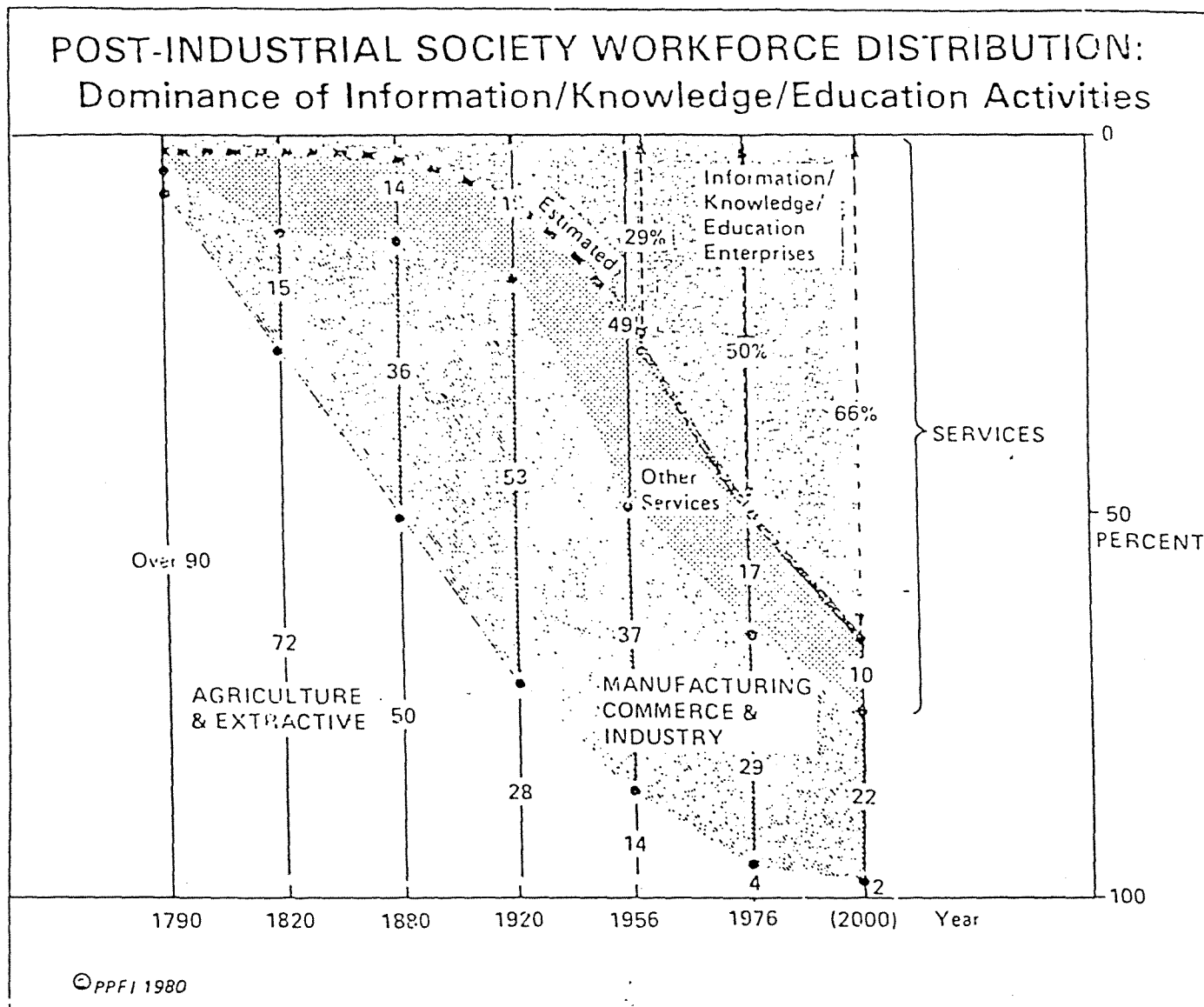
There has always been a tendency by any group of creative people and institutions to identify their own role and the technology on which it is based as central to culture. When sound was introduced into motion pictures, the German musicians' associations agitated publicly that "Sound movies are tasteless" ["Tonfilm ist Kitsch"] and "Sound movies are economic and spiritual murder" ["Tonfilm ist wirtschaftlicher und geistiger Mord."] When radio was introduced, American researchers noted that "The popularity of this new pastime [radio] among children has increased rapidly...[and] has brought many a disturbing influence into its wake. Parents have become aware of a puzzling change in the behavior of their children..." (A.L. Eisenberg, *Children and Radio Programs*, Columbia University Press, 1936.) Fiction and theater had at times been considered as harmful to moral and intellectual values. In Cromwell's England, there was no room for the popular frivolities of a Shakespeare. Even story-telling was suspected at times. Thus, Plato warned that since "Children cannot distinguish between what is allegory and what is not...it is therefore of the utmost importance that the first stories they hear shall aim at producing the right moral effect." Today, again, the so-called "new media" are accompanied by fears that they will harm traditional values of culture and their carriers -- books, theater, and film. Are these fears well-founded? Will traditional media decline in their significance and financial viability, in the same way that radio and

film did within the last few decades? This paper will look into this question. It arrives at an outlook for the future of traditional media, that is optimistic, at least for the United States.

What is the setting for the new media? Information is becoming the major product of advanced societies. Advanced economies are in the midst of painful transition from an industrial base to an information base. See Graph 1.1. Mass production is leaving for less developed countries, and what manufacturing that remains has a high information content. In highly developed nations, the core of economic activity will center on the production of information, its manipulation, and its distribution. (Unfortunately, in many cases the political system still thinks largely in the traditional categories of industrial production, and its policies tend to favor the producers of hardware rather than the producers and users of information, thus retarding economic development.) In the global economy, the major export of advanced societies are information goods and services. The "Americanization" of television around the world, the global role of IBM, or the ubiquity of American Express-- which have occurred at the same time that American cars, steel, and mining have lost their role--are reflections of these basic shifts in the international terms of trade.

The changes in mass media have to be viewed as part of these underlying shifts. Theater productions are expensive relative to output. As industrial productivity rises, and with it the

The Porat/Rubin/Molitor Curve



Molitor, G.T.T., "The Information Society: The Path to Post-Industrial Growth." The Futurist, April 1981

general wage level, theater becomes more expensive to produce. The technology of film reduces the cost of repeat performances. The technologies of broadcasting permit a geographical outreach at a low cost, and this reach is further extended by satellites. These advances in distribution tend to make video programs into a quasi-public good. The technology of cable television permits an increase in the number of simultaneous programs; but, just as importantly, it makes it easy to charge viewers for programs, and thus turns the public good back into a private good, in the way that theater, film, and books are.

## II. The Supply and Consumption of Information

Surveys of media development are typically supply-oriented; that is, they trace the development of books published, hours and channels of TV broadcast, etc. This is an approximation of audience interest, but the approach has its limitation insofar as it does not measure actual audience consumption of the information that is supplied. Consumers of media read or view selectively; nobody reads a 700 page Sunday New York Times from cover to cover. The amount of information individuals absorb is not fixed, but is growing; yet it is accompanied by a decline in attentiveness, i.e. in quality. Radio, for example, has been pushed into a background noise function, and daytime television in America plays increasingly such a role, leading to a quantity of hours of TV "viewing" which astonishes Europeans who are used to more concentrated viewing. An approach to investigate the actual amount of information that reaches a household, and how it

is distributed over the different media has been developed for Japan by Tetsuro Tomita, and it has been adapted for the US (Ithiel de Sola Pool and Russell Newman, "The Flow of Communication Info into the Home," 1984, MIT). The findings show that the average American "consumes" 61,556 words of mass media every day. Of these, 87% come from radio and television, or about 4,000 words per waking hour, 1 word per second. This number is up by 51% from 1960 to 1980. This is consumption. Supply of words is much higher. See Table 2.1. In 1960, mass media supplied about 3 million words per capita per day--including unwatched TV, unread papers, etc. By 1980, this figure had increased by 267% to 11 million words per capita per day! The ratio of words consumed to words supplied has fallen in two decades to less than one half of what it had been (from 1.4% to 0.6%). See Table 2.2, and the ratio has been declining for each mass medium. In absolute words consumed, electronic media have been gaining, while print media, mostly newspapers, has been losing. Television in 1960 accounted for 50% of information consumption. Figure 2.3. By 1980, this has risen to 64 %. Because words only, and not graphic images, have been counted, this calculation even tends to understate the information role of television. Over the two decades, TV words available daily per person grew from 0.5 million to 218 million at annual rate of 8.8%, for a total increase of 436%. It is likely accelerate significantly in the 1980s due to the penetration of cable. See Figure 2.4. Total TV consumption has doubled over two decades.

## 2.1

**OVERVIEW OF MEDIA GROWTH RATES:  
NUMBER OF WORDS PER PERSON PER DAY**

	1960		1980		Supplied		Consumed	
	WORDS SUPPLIED	WORDS CONSUMED	WORDS SUPPLIED	WORDS CONSUMED	TOTAL GROWTH	GROWTH RATE	TOTAL GROWTH	GROWTH RATE
TV/CABLE	523,821	20,448	2,809,679	39,380	536%	8.8%	192%	3.3%
RADIO	2,221,943	9,393	7,823,145	14,124	352%	6.5%	150%	2.1%
NEWSPAPERS	184,784	6,971	207,975	4,152	112%	0.6%	-59%	-2.6%
BOOKS	4,734	2,160	6,090	2,160	129%	1.3%	0%	---
MAGAZINES	29,299	1,536	30,775	1,536	105%	0.2%	0%	---
MOVIES	3,721	340	2,363	214	-64%	-2.3%	-63%	-2.3%
TOTAL	2,968,302	40,848	10,880,027	61,556	367%	6.7%	151%	2.1%

Neuman, W.R., de Sola Pool, I., "The Flow of Communications Into the Home", The Future of the Mass Audience Project (MIT), Preliminary Release, 1984

2.2

RATIO OF WORDS SUPPLIED  
TO WORDS CONSUMED

	<u>1960</u>	<u>1980</u>
TV/CABLE	3.9%	1.4%
RADIO	0.4%	0.2%
NEWSPAPER	3.8%	2.0%
BOOKS	45.6%	35.5%
MAGAZINES	5.2%	4.9%
MOVIES	9.1%	9.1%
WEIGHTED AVERAGE	1.4%	0.6%

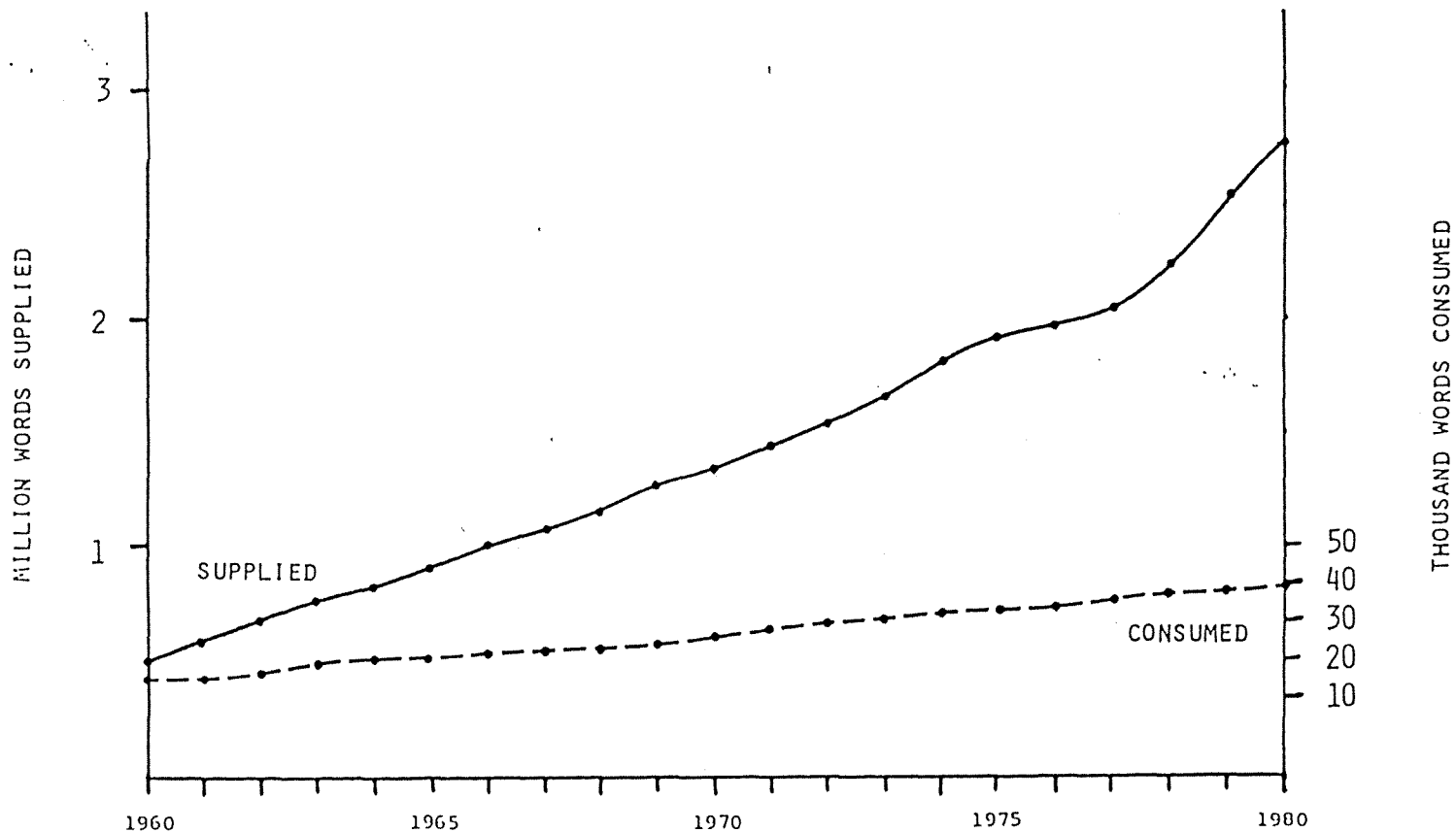
Neuman, W.R., de Sola Pool, I.; "The Flow of Communications  
Into the Home", The Future of the Mass Audience Project  
(MIT), Preliminary Release, 1984



TELEVISION/CABLE

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2.3

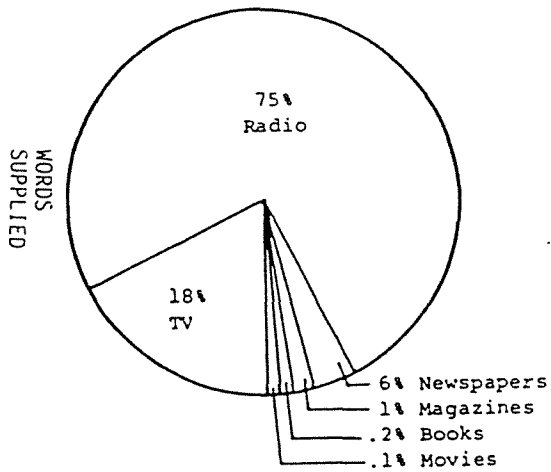


Neuman, W.R., de Sola Pool, I., "The Flow of Communications Into the Home", The Future of the Mass Audience Project (MIT), Preliminary Release, 1984

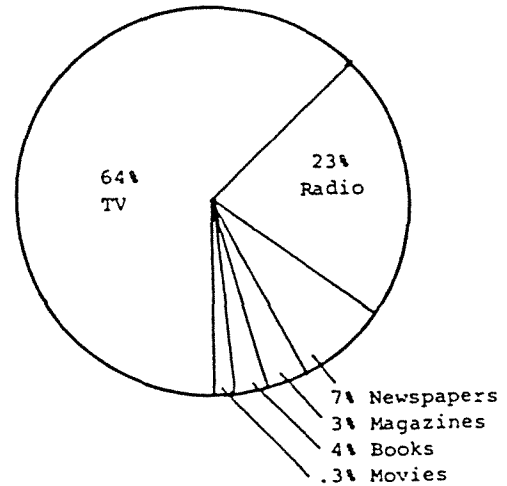
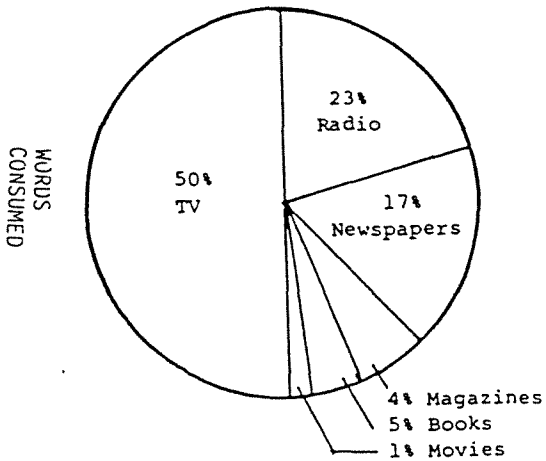
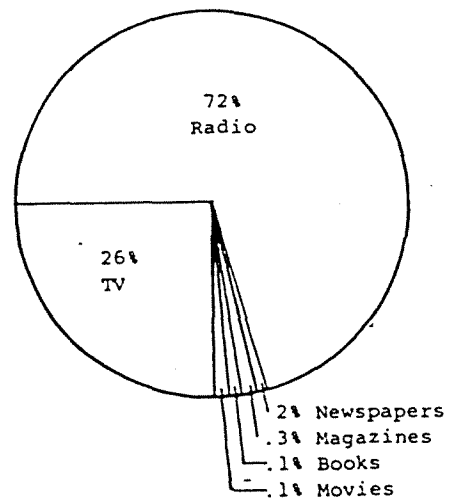
OVERVIEW OF COMMUNICATION FLOWS

2.4

1960



1980



Neuman, W.R., de Sola Pool, I., "The Flow of Communications Into the Home", The Future of the Mass Audience Project (MIT), Preliminary Release, 1984

from about 20,000 to 40,000 words per day, a growth of 3.3% annually though it is slowing.

Radio is the cheapest mass medium, both in terms of production and consumption. In terms of total word supplied to the typical household it is by far the most verbose (75% of all words in 1960 and 72% in 1980) Total words were 2.2 million words in 1960 and 7.8 million words in 1980, a total growth of 252%. Consumption grew 150% through the period to 14,124, a stable 23% of total words consumed.

Books are, on a word base, the most expensive of mass media. But they have the highest ratio of words consumed relative to supply. This figure is declining (46% in 1960, vs. 35% in 1980). It is lower (and about 15-20%) if one subtracts students and professional reading and leaves only leisure type reading. The number of words supplied is fairly low (4,738 in 1960, 6,090 in 1980), and growing at 1.3% for a total of 29%. Home consumption is static, with 2160 words per week and person in 1960 as well as twenty years later.

Theatrically exhibited motion pictures available locally are the smallest of the information flows, with only about 0.1% of supply and 0.3% of consumption of total words. Their supply declined by 64% during 1960-80 to 2,363 words, and their consumption fell by 63% to a mere 214 words per week and person.

The new viewing options lead to an increase in total viewing time. According to Nielsen figures for the first eight months of 1985, US households with only television watch 45 hours and 22

minutes per week, while cable households (now half of all TV households), watched a remarkable 58 hours. (Of course, the latter may be self-selected heavy viewers). Researchers at Michigan State University have found that the greater viewing options change viewing styles. Viewers tend to move rapidly from channel to channel, watching several programs almost simultaneously. This viewer-active channel-hopping is likely to favor programs that are visually arresting and whose plot line is simple to move in and out of. The present number one program in America, "Miami Vice", is such a program, and a televised drama is definitely not. Of course, newspapers and magazine reading is similarly non-linear among stories competing for attention, and similarly lacking a coherent plot.

There is also a specialization of viewers to favored channels. Table 2.5 shows that the percentage of channels actually viewed is continuously dropping with their total availability. While it is 72% where 1-4 channels are available, it drops to 34% for 26 channels or more. It is important to understand, however, that these 34% are different for every viewer; the TV audience tailors a selection of channels to suit household viewing preferences.

Households allocate time to different media, as we have seen; they also allocate money for them. Table 2.6 shows that, in 1976, household media expenses were: \$40 for books (11% of media expenditure); \$90 for newspapers and magazines (25%); \$33 for movie admissions (9%); \$179 for TV sets, records, etc., plus

AVERAGE NUMBER AND PERCENT OF CHANNELS VIEWED  
IN A HOME BY NUMBER OF CHANNELS RECEIVED

NUMBER OF CHANNELS RECEIVABLE	1-4	5-6	7-8	9-10	11-15	16-20	21-25	26+
AVERAGE NUMBER OF CHANNELS VIEWED	2.6	3.6	4.2	5.1	6.2	7.6	8.5	10.0
PERCENT OF CHANNELS RECEIVED VIEWED	72%	65%	57%	54%	50%	44%	36%	34%

Source: A.C. Nielsen, NTI, May 10 to 16, 1982

LeRoy, D.J., LeRoy, J.M., "The Impact of the Cable Television Industry on Public Television", Corporation for Public Broadcasting, 1983, p. 21

**Annual Per-Household Media Expenditures by U. S. Consumers, 1935-1976**

Note: All figures in constant 1972 dollars.

	Books, Maps	Newspapers, Magazines, Sheet Music	Motion Picture Admissions	Radio-TV Sets, Recordings, Musical Instruments	Radio-TV Repairs
1935	\$16.59	\$41.36	\$ 97.44	\$ 22.50	\$ 1.91
1936	18.26	43.00	105.61	29.21	1.85
1937	20.41	43.18	108.13	32.33	1.94
1938	17.69	41.15	102.79	27.15	2.01
1939	17.78	43.59	102.30	33.04	2.20
1940	17.85	44.94	109.53	37.68	2.45
1941	18.33	45.72	111.73	43.63	2.58
1942	19.62	47.39	131.64	42.73	3.10
1943	22.51	51.53	149.04	24.78	3.70
1944	24.80	48.51	134.89	17.14	3.97
1945	27.30	50.66	137.13	18.05	4.63
1946	29.38	54.82	152.80	55.68	5.73
1947	24.29	56.86	134.08	63.95	6.40
1948	24.46	57.55	121.03	60.73	7.28
1949	24.37	56.51	109.55	65.10	8.34
1950	25.54	56.64	100.94	91.73	10.73
1951	27.84	56.43	92.21	80.21	12.66
1952	27.64	59.25	85.24	82.40	13.79
1953	28.27	60.49	76.16	88.14	14.77
1954	27.42	62.08	73.04	92.73	16.39
1955	28.98	62.46	73.67	95.89	17.25
1956	30.67	60.64	72.23	94.76	18.49
1957	30.12	60.46	56.25	86.56	19.24
1958	29.65	59.78	47.02	81.57	19.75
1959	30.44	59.22	42.93	84.51	19.97
1960	30.34	57.65	39.45	79.99	20.62
1961	31.13	52.03	36.92	81.16	21.19
1962	31.63	56.65	34.24	82.31	21.18
1963	33.33	58.22	32.52	86.38	21.32
1964	37.09	57.48	29.92	98.00	21.40
1965	36.74	59.34	30.41	112.38	20.80
1966	39.68	67.49	29.16	133.85	20.40
1967	38.31	66.49	26.93	144.18	20.72
1968	37.42	68.19	27.49	146.38	20.38
1969	37.80	64.51	26.85	148.29	19.65
1970	40.26	66.64	26.10	151.83	18.44
1971	39.13	67.41	25.82	151.58	18.08
1972	37.94	70.27	24.66	164.44	18.33
1973	39.58	83.55	27.66	175.65	19.07
1974	39.84	92.52	32.15	174.22	16.28
1975	40.61	89.70	29.57	174.28	16.92
1976	40.02	90.21	32.69	179.10	16.43

Sources: 1957-1958 data: *Historical Statistics* (1975), series H 878-893. 1958-1959 data: *National Income and Product Accounts of the United States, 1929-74* (1977), pp. 90-91. 1973-1976 data: *Survey of Current Business* (July 1977), table 2.6, p. 29. Although not specified on the table, the number of households each year was developed from McCombs (1972), pp. 74-75, for 1935-1954 figures; *Historical Statistics* (1975), series A 288-319, for 1955-1970 figures; and *Current Population Reports* (August 1977), series P-20, No. 311, table A, for 1971-1976 figures.

Sterling, C.H., Haight, T.R., The Mass Media: Aspen Institute Guide to Communication Industry Trends, ( New York: Praeger Publishers, 1978 ), p. 117

\$16 for TV repair (55%). Thus, more than half of the media budget is spent on electronic media, but this is still less than their percentage in total words consumed (67%, see Table 2.4). Books, on the other hand, are consumed (4%) much less than their share in a household budget (11%). With movies, the discrepancy is 0.3% vs 9%, and with newspapers and magazines it is 10% vs 25%. Thus, radio and television "words" are a bargain relative to those of movies and print. It is not surprising therefore that (a) consumption of TV words increases and (b) that attempts are made to raise the price per word of TV information in the new media.

### III. Media Integration

An important trend of media is that of integration in information production. Publishing, film production, television, and computer applications are overlapping and merging to form the information industry. Computers, for example, already play a media role in videotex and in the generation of graphics; they will soon be a major tool for editing, when video recordings are stored digitally in computer memory; and in the distant future we may see them as a central element in three-dimensional holographic television.

Integration means that alternative pathways for the delivery of information are not neatly segregated from each other as in the past. Video programming can be distributed via terrestrial transmitters, on conventional UHF/VHF frequencies as well as over microwaves; from satellites; over coaxial and fiber cables; over

upgraded telephone wires; by cassettes, records, and photographic film. The written word, similarly, can reach users by a variety of paths. This inevitably leads to "territorial" disputes among the various interests allied with one form of delivery or another. It would be false to view this as a dispute between the public and private sector. In America, private broadcasters opposed private cable television. In Australia, the public ABC and the private broadcasters were united in their dislike of satellite broadcasting, public or private. It is often more useful to analyze new media issues not as private versus public, but as the newcomers versus an establishment which does not wish to share its favored position vis-a-vis the audience, producers, and advertisers.

Table 3.1 (J. Henry, in E. Noam, 1985) shows the relative per-viewer costs of various delivery systems. Cable television, because of its technological and economic advantages, is emerging as the central medium. Despite the advantage of cable, some of the others can find specialized audiences and tasks.

In addition to the technological interchangeability of delivery channels, there are also strong economic incentives for an integrated media system. The key element is the importance to control and coordinate the release of a media "product" among the different forms of distribution. Book publishers have traditionally sold hard-cover books first, and released lower-price paper-back editions only later; movie distributors released films first at first-run theaters, then at second-run theaters. In



Comparison of Pay-TV Services

	<i>Transmission Capital Investment</i>	<i>Cost of Equipment and Installation per subscriber</i>	<i>Likely Number of Channels Offered</i>	<i>Estimated Reach of Potential Subscriber Households</i>	<i>Average Transmission Investment per Potential Subscriber Reached</i>	<i>Average Transmission and Subscriber Investment per Potential Subscriber</i>	<i>Average Capital Investment per Potential Subscriber and Video Channel Offered</i>
DBS (high power)	\$400 million*	\$380-480	5-7	50 million <sup>d</sup>	\$8	\$440	\$75
Cable Television (700,000 city)	\$75-100 million	\$150-175	35-54	150,000	\$600	\$765	\$17.20
STV <sup>b</sup>	\$1-2 million	\$175-250	1	120,000 <sup>b</sup>	\$12.50	\$200	\$200
MDS <sup>b</sup>	\$1 million	\$175-250	10-20	100,000 <sup>b,d</sup>	\$10.00	\$220	\$14.60
SMATV <sup>c</sup>	\$30-40 thousand	\$150-170	10-30	500 <sup>c</sup>	\$70	\$230	\$11.50
LPTV <sup>b</sup> (pay)	\$200 thousand	\$175-200	1	60,000 <sup>b</sup>	\$3.50	\$190	\$190

NOTE: This table was compiled and estimated by Eli Noam from various economic and technical information in Jane Henry's paper, in order to compare the order of magnitudes in question.

\*\$400 million assumes building a high-powered system.

<sup>b</sup> Assumes broadcasting in a 700,000 metropolitan area.

<sup>c</sup> Assumes 500-unit building, addressable system, direct satellite feed. Building not rewired.

<sup>d</sup> Not including feed to SMATV systems.

Henry, Jane B., "Economics of Pay-TV Media, in E. Noam, Video Media Competition, Columbia University Press, 1985, p. 54

American, television programs went first to the networks, and later to independent station syndication. The underlying principle is the attempt to price-discriminate between classes of viewers of different demand elastically. The accompanying Table 3.2 shows the relative revenue per viewer at various distribution modes. The ability to price-discriminate is important, because many viewers receive what economists call a "consumer's surplus", that is, they have to pay less than they would be willing to. An example are the Olympic Games programs, for which many viewers would be willing to pay substantial sums if they had to. The significance of new media are that they permit a refinement of price discrimination by setting up a cascading chain of distribution down to high elasticity audiences. In America, the release sequence that is emerging for a work of fiction with popular appeal is:

- hard-cover book and/or theatrical production
- soft-cover book
- first-run movie theaters
- no second-run theaters
- video cassettes
- an emerging pay-per-view TV, typically on cable
- regular pay-TV
- "free" network TV
- "second-run" pay-TV
- TV syndication.

See Table 3.3 (Waterman, in Noam 1985)

THEATRICAL FILM RELEASE SEQUENCE: PRICE, REVENUES AND AUDIENCE DATA FOR MAJOR MEDIA <sup>(1)</sup>

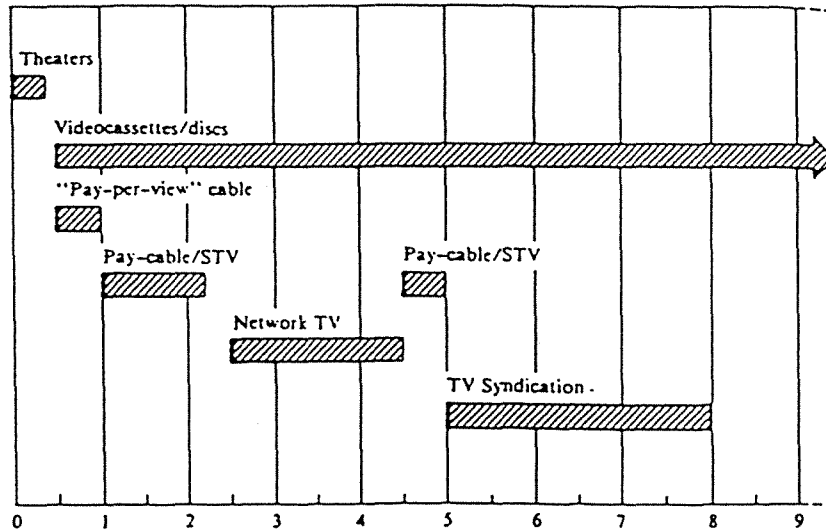
Media	Effective Retail Price per Viewer	Net Distributor (2) Revenue per Movie	Estimated Total Audience
Theaters	\$3.00 - \$5.00	\$ .75 - \$1.25	5 million
PPV Cable/STV	\$ .67 - \$1.33	\$ .30 - \$ .60	10,000 - 20,000
Pay Cable/STV(monthly)	\$ .50 - \$1.00	\$ .11 - \$ .14	10 - 15 million
Network TV	free	\$ .04	65 million
Syndicated TV	free	\$ .01	45 million
-----			
Pre-recorded Videocassettes			
Sales	\$4.17 - \$12.50	\$1.04 - \$3.12	8,000 - 24,000
Rentals	\$1.25 - \$2.50	\$ .31 - \$ .62	480,000 - 960,000

(1) Assuming a \$20 million theatrical grossing film

(2) Net of distribution expenses(but excluding advertising)

Source: David, Waterman and Associates

David Waterman

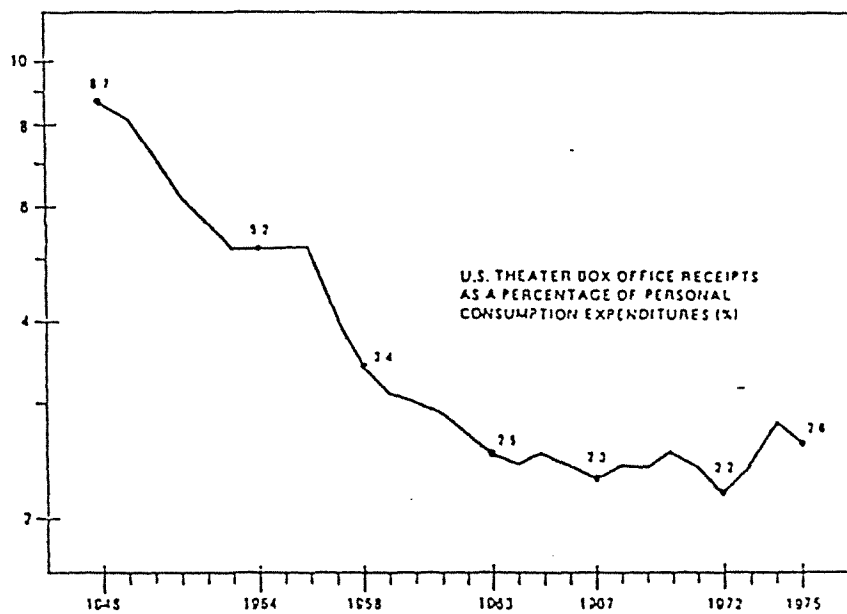


Representative Release Sequence for a Major Theatrical Feature.

Waterman, David, "Home Video and Distribution of Films", in E. Noam, Video Media Competition, Columbia University Press, 1985, p. 230

If the audiences can be successfully segmented from each other through timing of release, the revenue for producers can increase substantially. According to an old estimate by respected economists, American viewers would be willing to pay collectively \$20 billion per year for the programs which they receive for free, including the advertisements (Noll, Peck and McGowan, 1973). The new media reduce this consumer surplus considerably. It contributes to inequality. A historic perspective is necessary, however. The present consumer surplus has been a temporary aberration rather than typical for the past, and is attributable to the peculiarity of conventional TV, which is a highly efficient distribution channel but a terrible collection mechanism for the providers of programs. Hence, television as an entertainment provider had become a public good, in contrast to most other forms of entertainment. Hardly anybody, after all, attends a movie, a major sports event, or a professional live arts performance for free. One needs tickets even to the Bolshoi Ballet. The accompanying graph 3.4 shows how much of the share of income that is devoted to movies has fallen, from 8.7% in 1948 to 2.2% in 1972. It would stand to reason that viewers, if forced to, would be willing to pay at least as much today and probably more, given more leisure time, greater disposable income, greater convenience of home-media for impulsive viewing, and the greater number of immediately available viewing options.

## U.S. Theater Box Receipts As a Percentage of Income



Source: David Waterman and Associates

In order to realize the opportunities, strong economic incentives exist for a producer of a program to try to control directly or indirectly all stages of its distribution, in order to establish the most profitable sequence of releases. Such incentives are not particular to private firms only; public broadcasters have similar motivations, unless they have unlimited budgets, which they do not. They may choose not to follow these incentives. But even the BBC, despite its often vigorous criticism of private broadcasting, had entered into an agreement in America that would have given its programs with priority to a private pay-cable network. Only later would the Public Broadcasting Network PBS be able to show these programs for free. In a different approach, Britain's independent TV Channel 4 has negotiated co-production deals with independent producers that permit them to distribute the films first through theater, and only later through Channel 4. In the US, HBO makes similar arrangements with movie studios.

A related economic factor favoring integration of media revolves around the "spill-over benefits", or externalities, from one stage of distribution to the next. Advertising and promotion for the book stage, for example, benefit the subsequent cable and broadcasting distribution. Hence, it is in the interest of a media firm to be represented at all stages of distribution, from books and motion picture to cable and broadcasting. This leads to the large multi-media firms such as TIME in America, Bertels-

mann in Germany, Murdoch (News Limited) in Australia, Thorn EMI in Britain, and Havas in France.

What are the implications of this growing coordination of distribution modes on media productions? First, as discussed, consumers end up paying more than in the past, with all of the income-distributional issues which this entails. On the positive side, it encourages the production and supply of a larger number of TV programs, books, plays, and films, because there are more outlets for these works than in the past, and they are more diverse. Some works that would not have been created are now being produced. On the other hand, not all media programs benefit equally. The system favors creations that can be distributed through multiple stages, such as popular fiction, and it aids the large integrated firms that can shepherd such works through the various stages. This incentive structure extends not only into film and television production, but also into book publishing and theater, because part of their production decision will depend on the assessment of the chances in further distribution stages. Similarly, productions that are specific to a national culture are not as attractive under such incentives as are works of a global appeal which can be distributed internationally.

#### IV. Americanization?

It is important to stress the term "global culture" rather than "Americanization." Critics of new media have invariably made the argument that in a program selection decision by a



broadcaster in country X, the American program that has already been produced will always be cheaper than a program produced from scratch by broadcaster X. Hence American programs will predominate. To political pessimism ("The Russians are coming") and economic pessimism ("The Japanese are coming"), cultural pessimism is added ("The Americans are coming.") The argument has been repeated so often that it is accepted as a kind of "iron law of television" and hardly anyone bothers to think through its dubious logic. On economic grounds, however, it must be rejected as insufficient for several reasons.

First, the statement "It is cheaper to buy an already produced American program rather than to produce a program locally" is a bit like saying "It is cheaper to take a Toyota taxi into the city rather than to buy a new Volkswagen car." That is, it compares apples and oranges, marginal costs of rental with total costs of investment. It assumes that the American program is part of a release sequence, whereas country X's production is not. But what if X's program had also been exhibited in its movie theaters, shown over its pay-cable network, and had been licensed to various other countries, including America (where the many cable program channels are hungry for new programs)? Could the television station in X still be said to have to pay for the entire program production?

Second, why does the same logic of the statement not apply to the programs of countries other than the US which have already been produced, and also to older films from Country X? Ultimate-

ly, all it says is that it is cheaper to re-run someone's old program than to be involved in a new one.

Third, the argument assumes that the price for the American program will be around the marginal cost for the American owner, that is, very low. This is either weak economic analysis, or a revealing glimpse into the mind-set of a monopolist who is indeed accustomed to buying a program at the lowest cost at which its owner will part with it, which is marginal cost. But it is elementary that in any competitive arrangement, price will not be determined by cost but by supply and demand conditions. If a half-dozen networks would truly bid for an attractive American program, its price may end up significantly above a newly produced program of Country X. In the same way, an attractive program by Country X today is sold in most foreign countries for almost nothing. Each country is trying to keep its program acquisition cost down, but collectively they are depressing the market for film productions, and therefore end up paying more of their share towards the cost of their domestically produced programs than they would have to otherwise.

Fourth, the statement implies American programs to be created without regard for foreign tastes. But this would be economically foolish for the American TV producer, whose profitability depends on syndication. Potential attractiveness to foreign audiences is planned into many American films and television programs. If European pay-TV systems and competitive bidding existed, such considerations would become still more

important. Hence, the "Americanization" of European televisions is accompanied by a "Europeanization" of the Hollywood programs. The global television culture can be a two way street, at least across the Atlantic. It is more problematic with the developing world, where a one-way street will persist.

Finally, the figures of production in Country X tend to assume static conditions in the cost of program production. One of the great myths of televisions is that it is inherently expensive to produce, and that it permits therefore only a handful of central studio locations. Of course, a professional production costs money. But over time, the cost of studio quality equipment has fallen steeply, where they could develop. Independent producers have sprung up who can produce a program of decent quality at a lower cost.

#### V. Media Diversification

In the past, a scarcity of electromagnetic spectrum allocation (often self-imposed) permitted only a tiny number of program channels. Because of their limited number and cultural and political importance, their control was an issue of great importance. Their program content had to be some compromise between the viewing interests of numerous groups. For the well-educated, sharing the channels with the less educated was generally an experience they loved to hate. In America, commercial television with its body-count economics is aimed at the peak of the bell-shaped statistical distribution, which is often but mathematically erroneously referred to as the "lowest

common denominator." It strongly reflects popular tastes. Many educated Americans stopped watching such television, or at least claimed to do so. PBS was the cultural supplement, more praised than watched. In many European countries, on the other hand, the educated elite took control over program content and shaped it substantially according to its viewing preferences, with the partly idealistic expectation that such programs would be uplifting and valuable to all.

American commercial broadcasting has not been bad in the sense of low creativity relative to its self-defined task. It is not necessarily "easier" to successfully create popular entertainment for a huge and fickle audience. Intellectually more ambitious dramas can have their own relentless cliches and formulae just as much as a situation comedy. What one has to understand is that the outputs of a medium are defined by its structure; change the structure and the outputs will change, too. There is nothing inherent in private media that produces only trash. Private book publishers, magazines and film makers have produced high-brow as well as low-brow products, because they do not require an audience of 20 million households to be kept alive, as US-network shows must. When there are only two or three channels, profit- and audience-maximizing broadcasters will aim their product at the peak of a Gaussian distribution of viewers. But when the number of channels increases, economic logic dictates that broadcasters disperse across the distribution, and some will specialize in programs for particular

audience segments. This is what publishers and movie producers do habitually.

One problem with social scientists is that they often prefer re-interpreting old data to collecting new ones; thus, a good number of European media commentators tend to have outdated notions about new media in America, in particular about its center-piece, cable television. One reads continuously the following (a) American cable television is in great financial difficulty; (b) it is just like the three networks, only more of the same; (c) it is enormously concentrated and in the hands of "big business".

This is largely incorrect; I will try to correct these misperceptions, because they affect research and policy.

(a) American cable television is mostly highly profitable, with pre-tax rates of return on investment, for established suburban cable systems, in the range of 20-30%. (Michael Botein, Communication) Cable has had problems in several large cities, partly because excessive bidding for franchises has pushed up costs beyond what the market would bear.

(b) The program diversity on cable TV is vastly greater than before, particularly for the smaller cities. New and specialized program channels make viewing much richer. As of November 1985 there are 36 national basic satellite-distributed channels, 12 pay-channels, (soon) 2 pay-per-view services, 8 audio services, 10 text services, and 1 computer-download service over cable (CableVision Magazine, Communication). These channels provide

programs such as news (CNN); public affairs (C-SPAN); popular movies (HBO, Showtime, etc.); special movies (USA, Cinemax); performing arts (Arts and Entertainment, Bravo); documentaries (Discovery); children programs (Nickelodeon, Disney); ethnic (BET); multilingual (SIN); sports (ESPN); business (FNN); health (Lifetime); soft-core pornography (Playboy); religion ("pray-TV", such as CBN and ACTS); rock (MTV); country music (Nashville), etc.

The attached Table 5.1, prepared by British analysts in 1982, compares New York and London TV viewing options on the same night, and illustrates the program diversity of cable. Since that time, London has added one channel to a total of four, while Manhattan has added ten to 35.

Our Center for Telecommunications and Information Studies at Columbia University is conducting several analyses of the program diversity in American cities, comparing a typical week's programs in 1985 with those of 1970. The differences are indeed significant. A city like Tulsa, Oklahoma, not exactly a cultural cross-roads, has a program diversity and quantity far beyond anything that existed only a few years ago.

To analyze changes in program quantity and distribution, broad categories of programs were defined by Allen Jackson, such as "Informational" and "Feature Film." These were then further subdivided into 42 sub-categories such as "Police, mystery, suspense" and "Current Issues Documentary." In the 15-year period, Tulsa added 2 broadcast stations to the previous 4, and

TV VIEWERS' CHOICE IN NEW YORK AND LONDON  
AT 9.00 p.m. ON 7 JUNE 1982

<i>Manhattan Cable</i>	<i>BBC/ITV</i>
1. <i>MASH</i>	1. News
2. <i>Black Ghetto Life</i> (documentary)	2. <i>Hitch-hiker's Guide to the Galaxy</i>
3. <i>Sister, Sister</i> (film)	3. <i>Minder</i>
4. <i>Merv Griffin</i> (talk show)	
5. <i>The Kennedy Years</i> (documentary)	
6. Baseball	
7. Spanish Play	
8. Variety Show	
9. <i>Adam and Eve</i> , with Nureyev (dance)	
10. <i>Attack</i> (film)	
11. Spanish Drama	
12. <i>Orpheus</i> (opera)	
13. International Education (public access discussion)	
14. Seminar on Nuclear Arms	
15. Baseball	
16. <i>Bye, Bye Birdie</i> (film)	
17. <i>Danger UXB</i> (drama)	
18. <i>Dog Day Afternoon</i> (film)	
19. Gymnastics	
20. Classified Advertisements	
21. Royal Ballet	
22. Folk Art (discussion)	
23. Chinese Cooking	
24. News	
25. <i>High Country</i> (film)	

Source: Andrew Neil (ed.), *The Cable Revolution—Britain on the Brink of the Information Society*, Visionhire Cable, London, 1982.

Veljanovski, C.G., Bishop, W.D., Choice by Cable, The Economics of a New Area in Television, (Lancing, Great Britain: Institute of Economic Affairs, 1983), p. 67

built a 35 channel cable system that carried these stations as well as additional channels. Total program hours increased eleven-fold. See Table 5.2. Of major program categories, informational programs increased ten-fold, from 87 to 1015 hours per week; entertainment quadrupled to 768 hours; news increased ten-fold to 612 hours; religious programs expanded forty times to 400 hours. These are phenomenal quantities. Among sub-categories, there are major quantity increases in every segment. See Table 5.3. Even where the percentage is small, the absolute number of hours is high: performing arts 54.5 hours/week, up from 4.5. Public Affairs 181.3 hours per week, up from 2.3. Money and Finance 120 hours, up from 1.0. Children Information 30.8 hours, up from 13.0. Arts documentary 9.8 hours, up from zero. Etc. Time and space do not permit an elaboration of the preliminary results; but their general conclusion is one of strong diversity: every program type had at least 43% more "air" time; and ten new program types appeared. On the other hand, programs for American Indians, a not insubstantial part of Oklahoma's population, fell from 1 hour to zero. Thus, not all segments of the population are equally served.

(c) Market concentrations among cable operators is quite low, though they are growing. The two largest systems, TCI and the second, ATC, have 8.5% and 6.0% of subscribers, respectively. The figures are increasing, however. Several "big business" firms have been unsuccessful in cable, including General Electric, American Express, Westinghouse, Hughes, CBS, and RCA.



## ALL CHANNELS, BOTH YEARS

Program Type	TOTAL HOURS			PROPORTION OF TOTAL HOURS		
	1970	1985	INDEX	1970	1985	INDEX
CHILDREN'S						
Animated Ent.	15.0	170.4	1136	3.43%	3.22%	94
Live Entertain.	15.5	96.0	619	3.55%	1.82%	51
Live Information.	13.0	30.8	237	2.97%	0.58%	20
ENTERTAINMENT						
Situation Comedy	38.0	172.0	453	8.70%	3.25%	37
General Drama	4.5	125.5	2789	1.03%	2.37%	231
Adventure, SciFi	6.5	76.5	1177	1.49%	1.45%	97
Quiz, Game	24.9	70.5	283	5.70%	1.33%	23
Police Myst.Susp.	8.5	70.4	828	1.95%	1.33%	68
Daytime Drama	37.1	60.0	162	8.49%	1.14%	13
Performing Arts	4.5	54.5	1211	1.03%	1.03%	100
Western	8.0	44.5	556	1.83%	0.84%	46
Variety	12.5	39.5	316	2.86%	0.75%	26
Humor	4.5	29.8	662	1.03%	0.56%	55
Adult		24.8	na		0.47%	na
INFORMATIONAL						
Classrm. Instruct.	32.8	187.0	570	7.51%	3.54%	47
Public Affairs	2.3	181.3	7883	0.53%	3.43%	652
Finance, Money	1.0	120.2	12020	0.23%	2.27%	994
Instruct., Advice	6.3	113.0	1794	1.44%	2.14%	148
Health, Fitness		112.1	na		2.12%	na
Conversation...	33.0	98.6	299	7.55%	1.87%	25
Wildlife Nat.Doc.	0.5	27.5	5500	0.11%	0.52%	455
Travel	0.5	25.5	5100	0.11%	0.48%	422
Entertain. News		23.6	na		0.45%	na
Biography Docu.	1	23.3	2330	0.23%	0.44%	193
Auction, Sale		20.0	na		0.38%	na
Curr. Issue Doc.		16.0	na		0.30%	na
Medical Instruct.	1.0	15.5	1550	0.23%	0.29%	128
Law Documentary	0.5	10.5	2100	0.11%	0.20%	174
General Document.	4.5	10.0	222	1.03%	0.19%	18
Arts Documentary		9.8	na		0.19%	na
Foreign Language		7.3	na		0.14%	na
History Document.	0.5	4.8	960	0.11%	0.09%	79
Local Affairs	2.7	3.8	141	0.62%	0.07%	12
Hearing Impaired		3.0	na		0.06%	na
Farm	0.8	2.3	288	0.18%	0.04%	24
SPORTS						
Spts.Event Repeat	2.0	136.0	6800	0.46%	2.57%	562
Sports Anthology	4.1	131.2	3200	0.94%	2.48%	265
Sports Event Live	19.6	94.0	480	4.49%	1.78%	40
UNPROGRAMMED						
Off Air	235.2	564.3	240			
To Be Announced		31.3	na			
TOTAL						
PROGRAMMED HOURS	437.0	5284.6	1209			
TOTAL HOURS	672.0	5880.0	875			
CHANNELS						
	4	35				

19-b Jackson, Allan, "A Study of Program Supply in Tulsa, Oklahoma, 1970-1985," Research in Progress, Columbia University

On the other hand, several major media firms have been successful, such as Time Inc. and Times Mirror. Size alone is not enough. To start a network today requires very little investment on the distribution side beyond some movie rights and a satellite transponder lease. The main barriers are the marketing of the service to cable operators and subscribers, given a frequently limited number of available channel slots on the cable. There are still barriers to entry, but compared with the days of the three networks, electronic media are more decentralized and unconcentrated than they have been in a half century.

The extent of this diversity has been slow to find itself into international statistics. The study by Wedell and Uyken ("The Future Extent of Competition between Print and the Electronic Media", 1985) provides a glimpse in its figures on cable households receiving satellite transmission. All developed countries outside the USA (not including Canada and Japan, for which data is unavailable) comprise in the aggregate only 15% of the households in the US who receive such programs in 1985. The number of satellite channels for America is listed as 57. Furthermore, about 1.5 million American households have 'back yard dishes' for the direct reception of the satellite programs aimed at cable systems ("quasi-DBS") and are usually not captured by statistics.

I have gone to some detail, in the discussion of diversity, not in order to promote the new media system that exists in the United States, which has some serious problems, of which the

most serious is the scandalous poverty of public broadcasting. However, one cannot analyze the future of the new media without a factual grasp on how they work in the country in which they have been pushed the hardest.

## VI. FILM

Because films are the closest substitutes to television, the film industry has been most concerned with new media. The industry still remembers the traumatic years after the introduction of television. In America, film theater admissions dropped from \$3.4 billion in 1948 to \$1.2 billion in 1963--on a per capita basis from 32.3 to 9.9 theater admissions. Box office revenue declined, in real terms, from \$2.1 billion to \$1.0 billion. The number of movie theaters went down from 18,000 to 12,000. [Graph 6.1] During those fifteen years, the percentage of homes with television sets went up from 0% to 91%.

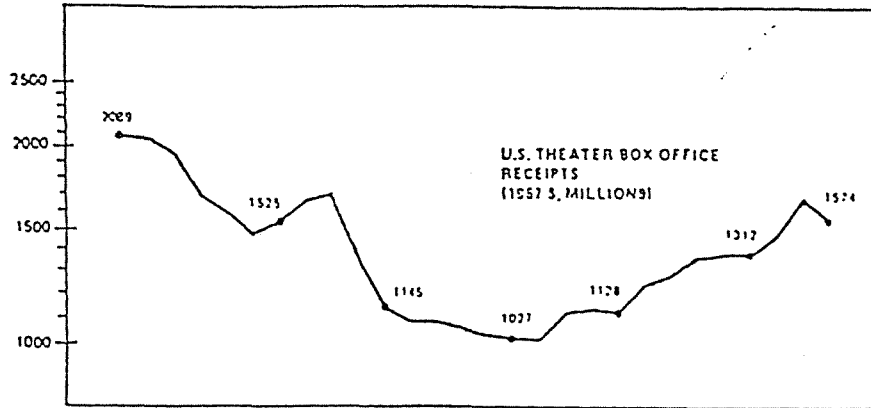
In other countries, the decline was similarly steep. In the U.K., it fell from 1.2 bil. in 1955 to 500 mil. only 5 years later, and to a miniscule 63 mil. in 1982. (Source: Screen Digest.)

A regression study, using 1955 American data, found that the relation between the percent change in per-capita receipts for motion pictures between 1948 and 1954, (Y), and television penetration percentage, (X), was  $Y = 70.78 - 1.11X$ . Stuart, (1982) In other words, each percent of TV penetration was associated with a 1.1% decline in nominal per capita revenues at the theater box-office. Similarly, the number of theaters per capita changed, as a percentage E, with TV penetration X according to  $E = 17.67 - 0.40X$ .

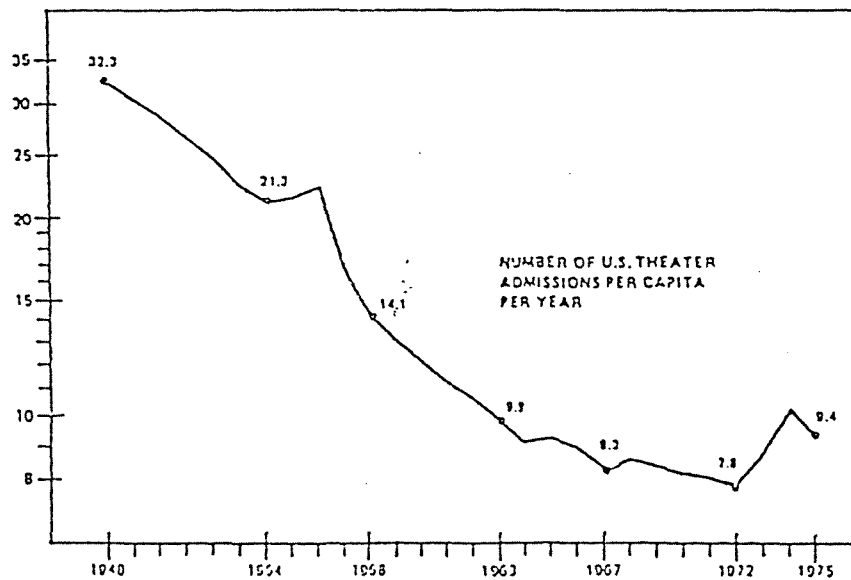
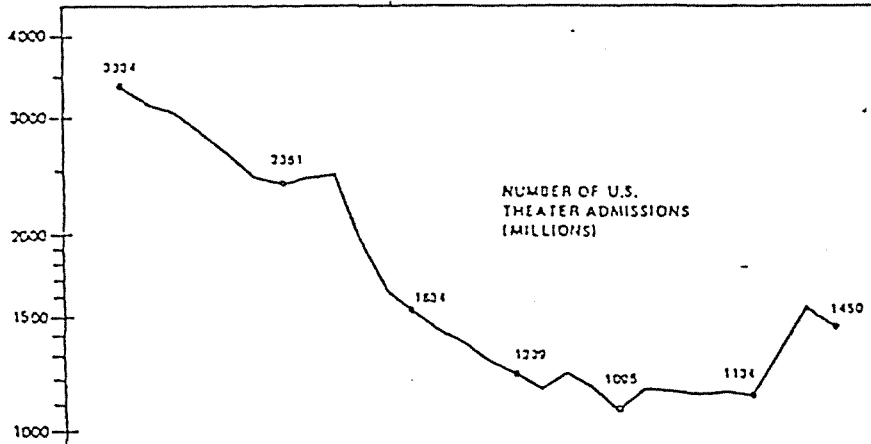
The film industry went through three stages. First, it underestimated television by analogizing it to the radio with its

6.1

U.S. THEATER BOX OFFICE RECEIPTS



U.S. THEATER ADMISSIONS



comparatively slow penetration and its early dubious technical quality. Television, in contrast, established itself almost overnight on the basis of the then already existing broadcast framework of industry, technology, and regulation. The film industry was severely affected. Profits of the ten major studios fell from \$122 million in 1946 to \$30 million three years later. Total theatrical features produced declined from the annual average of 488 in 1927-47 to 253 in 1954, but labor costs did not fall, partly due to union protection. Table 6.2 shows that actors' minimum daily wages in Hollywood rose from \$35 in 1945 to \$80 in 1956. For a journeyman prop-maker, hourly wages went from \$1.80 in 1945 to \$3.14 in 1956. For writers, weekly minimum went from \$125 in 1945 to \$350 in 1956. When the studios finally realized the extent of their problem, they went to the other extreme and geared up for battle by totally reorganizing themselves. The stock company system with its galaxy of contract stars and its vast fixed costs was abolished. (This led certain actors to move first into television, and later into electoral politics.) Independent producers started to emerge. Picture quality was improved (CinemaScope); special effects were introduced (3-D, Cinerama); huge budget movies were produced; and taboo themes were touched for the first time.

In that period of hostility towards television, Hollywood still thought of itself as serving a theater audience. Ironically, although the studios had been divested by the 1948 Paramount decree of their thousands of theaters ( 24% of all US

**Average Weekly Wage Rates of Hollywood Actors, Propmakers,  
and Writers in the U.S. Motion Picture Industry, 1928-1977**

	Daily Minimum Wage for Actors	Weekly Minimum Wage for Actors	Hourly Wage for Journeyman Propmakers	Weekly Minimum Wage for Writers
1928	N/A	N/A	\$1.00	N/A
1935	\$ 15	\$ 65	1.28	N/A
1937	25	65	1.41	N/A
1941	25	100	1.71	N/A
1945	35	115	1.80	\$125
1947	55	175	2.50	N/A
1952	70	250	2.75	250
1956	80	285	3.14	350
1958	100	350	3.37	385
1962	112	392	4.35	450
1971	138	483	5.11	525
1977	225	785	7.89	821

Notes: 1928 figure: Land (1968), p. 107; other years: Office of Telecommunications Policy (1973), table 21,  
and material from the Screen Actors Guild (first three columns) and the Writers Guild.

Sterling, C.H., Haight, T.R., The Mass Media: Aspen Institute  
Guide to Communication Industry Trends, ( New York: Praeger  
Publishers, 1978 ), p. 261

theater) just at that time, the founders of the movie business were economically and emotionally still attached to theatrical distribution.

The hostility toward television began to crumble in the mid-fifties when the studios realized they were not beholden to one particular form of distribution. They began to produce for television such shows as "MGM Parade," or "Warner Bros. Presents," ostensibly to promote their new theatrical films. Eventually, the pretense was dropped and the studios openly began producing for television through subsidiaries (Screen Gems for Columbia; Sunset for Warner; etc.) Quite rapidly, this part of their business became indispensable to several motion picture firms. By 1978, their market share in network series was 33.3%. They also discovered the enormous value of their film libraries to the new media with their voracious appetite for programs. Films began to be less of an exception on television, despite massive opposition by theater owners. The resistance of theater owners to TV screening was breached when RKO exited in 1955 from theatrical productions and concentrated on TV films only, offering all of its old films to television. By 1958, almost 10,000 pre-1948 Hollywood films were available to television; audiences spent 1/4 of their TV time viewing movies, more than 4 times the time spent at the theaters. (Stuart, 1982) Shortly thereafter, the restriction against newer movies was dropped after agreements with the unions. Within a few short years the mighty Hollywood studios had become a client of television,



fiercely competing with each other and with upstart independent producers to supply the networks.

It is important to recount this period of transition, because the film industry, like the Bourbons, learned nothing and forgot nothing, and would repeat virtually all of the same mistakes when cable television emerged with its potential for pay-TV movie channels. First, Hollywood ignored it and let others take the lead in program distribution. Then, when it realized the importance of the new medium, it went on the counter-offensive and started alliances with the TV networks. Joint ventures were formed in particular in opposition to the new cable program giant HBO. First was "Premiere," which died for antitrust reasons; then various alliances, including those of CBS with Fox, RCA with Columbia, etc. The three networks, similarly, tried to get into cable programming, but they, too, have not been particularly successful.

The third stage for Hollywood has been to come to an accomodation. Its feature movies are now being co-financed by cable firms ("pre-buy"), in particular HBO. It has also started to produce special, for-cable movies, just as it did for the networks. And its film libraries are actually being sold or rented to cable program services. Most successful had been Warner, whose former subsidiary distributes the successful rock channel MTV and children's channel Nickelodeon. Recently, a major studio (MGM) has even been merged into a cable operator (Turner).

Ironically, despite its myopia, Hollywood has been helped by the emergence of the new media, because the real losers have been the traditional broadcasters and networks. Instead of squeezing through only three main distribution channels, program producers can now reach audiences in many new ways, either alternative to network distribution, or preceding it as part of a release sequence that moves from low to high demand-elasticity audiences. Thus, their bargaining position has improved, together with the profitability of their operations; motion pictures have become much easier to finance than in the past, with a line-up of pre-sold television network rights, wealthy investors seeking tax-shelters, cable networks co-production financing, non-refundable guarantees by theater exhibitors, and cassette deals. Motion picture production, in consequence, has been rising. In 1977-79, the low point, the seven major studios produced an annual average of 86 films. In 1980-82, this figure had grown to 144. (Waterman) For 1983-84, it is 165 and growing (Motion Picture Association of America, Communication.) This is still considerably below the 270 annual films of the 1948-52 period, but the trend is upwards. Counting movies released by all distributors, 398 new features and 122 reissues were issued in 1984, for a total of 520. Two years earlier, these figures were, respectively, 365 and 68, for a total of 433. Jobs have consequently increased, too. In 1984, there were 6,000 more people employed in the motion picture industry than in the

preceding year, a 2.8% increase. Production and services personnel increased 15.4%. (MPAA, 1985)

Hollywood has also become active in video cassettes. This is the one form of distribution where the traditional film producers have kept a significant control over distribution. See 6.3.

For this and related reasons, the value of film libraries has gone up tremendously, and this is reflected in the enormous prices for which studios have recently been bought. The steady rental revenue from these libraries shelters a studio from the effects of a few unsuccessful movies.

The magnitude of the revenue from pay TV is substantial. According to Thomas Guback, pay-TV companies paid about \$375 mil. in 1981 for movie rights; in comparison, the two largest US movie theater chains, General Cinema and United Artists Theater Circuit, both with hundreds of theaters, paid \$155 and \$144 million respectively. The numbers of films screened by three pay-cable services in 1981 was 1152. Table 6.4 Of these, many are repeats. (On the other hand, there are a good number of program services besides the three listed.) The numbers illustrate the size of pay-cable's appetite.

In the words of the President of MCA-Universal, a major producer: "If you took away the extra revenue we get from cable, no one would make any movies." (New York Times Magazine, 3/28/82, p. 42).

There is also increased demand for foreign films, and American firms have been quietly buying rights in Europe. Some American or foreign movies that would not be theatrically exhibited in most locations outside of major cities due to their specialized interest are being shown on cable television. Locally thin audiences can, up to a point, be aggregated nationally through cable. This is also applicable to cassette recordings which can be targeted to a still more specialized audience. Cable channels expect a much lower audience rating than the TV networks, and are in constant need of diverse materials. They can also carry films that are sexually more explicit, and this permits distribution of many movies which the networks would not touch.

Hence, for movie production the new media have been a positive development. The new landscape has more production, more work, more diversity, and less concentrated power than before, (HBO's power is the major exception, but it is steadily eroding). These benefits do not extend only to major producers, but also to the many independents, and they reduce the client dependence of artists and independent producers upon the graces of a few networks. In Britain, the creation of Channel 4 has led to a tremendous development of small independent film producers; they have created artistically respectable programs for reportedly often only \$40,000 per hour, an embarrassingly low production cost in comparison with those of the ITV companies and the BBC.

Are all types of film production equally benefitted? As has been discussed above, an integrated media system encourages the creation and production of works that are appealing across several delivery media. This means a relatively greater production incentive for programs appealing to middle and upper income classes whose income carries greater weight for program producers decisions. But this is not different from the present situation in movies, the theater, and book publishing. Furthermore, the production of movies appealing to older age groups is likely to increase.

A major question is whether the emergence of new media will financially squeeze public broadcasters in such a way as to reduce the support which film makers receive. As the television broadcasters point out, for all German film makers, revenues from movie theaters in 1981 were only DM 51.6 million, while revenue received from German broadcasters were DM 361 million, seven times as high. (Marianne Renz/Werner Taubert "Die Deutsche Filmwirtschaft in Spiegel der Amtlichen Film-Statistik," in Media Perspektiven, 9/83, p. 615.)

The question whether cultural or experimental programs would be carried by the new media is dealt with elsewhere in the paper. Negative developments are quite possible if the public funding mechanism is unwilling to maintain its previous level of support for programs that are of social importance. The existing system of internal subsidies within a monopolistic broadcasting

system is one form, but in no way the only one, to support such programs.

A frequent question is what the fate of movie theaters will be in the new media landscape. Is there any role left for them? American movie producers have lost their nostalgia for the traditional partners. But theaters are important, and will continue to be so. In the US, despite the new media, cinema attendance has had a minor renaissance, going up from its 1972 bottom of 1.1 billion (7.8 per capita). By 1984, this figure had risen to 1.5 billion (9.6 per capita.) See Graph 6.1.

Total number of screens was up from 12,652 in 1963 to 20,200 in 1984 (Motion Picture Association of American). Theater receipts are up (Graph 6.1). These figures are remarkably higher than in several European countries. In Germany, per capita attendance is 2.3, in Britain, about 1.

(In Great Britain, movie attendance plummeted from 1.58 bil. in 1945, to 500 mil. in 1960, 116 mil. in 1975, 96 mil. in 1980, and 63.7 in 1982. Except for Japan, no major country has as many VCRs as Britain. But the decline of movie theater attendance has long preceeded that of VCR penetration.)

The major contributors to rising theater attendance in America have been teenagers. More than half (54%) of movie audience been under 24 year old, and some of the commercially more successful movies reflect their tastes. For this age group, the social component of going out in the evening is not replaced by home pay-cable. (Interestingly, private video screening rooms

cable audience that is middle aged or older, is not so much diverted from movie theater as it is added. A second major reason for theaters is their promotional role in creating a familiarity and anticipation for a film, which benefits subsequent stages of distribution. And a third reason is that theaters permit to differentiate between customer types; it would usually not make sense to omit that stage, unless time pressures existed for a release over cassettes or pay-cable release. Figure 3.3 and Table 3.2 illustrate this point. The net distributor revenue for movie viewers is somewhere between \$.75-1.25. To skip this stage would lose this high-revenue audience to pay cable (\$.11-.14 per viewer.) On the other hand, revenues for video cassettes can be higher, but not for rentals. Since it is impossible in America to separate the cassette sales from the cassette rental markets (due to the "first sale doctrine"), theater distribution remains at the top of the chain. Cassette recordings and pay-cable follow hard on its heels, benefitting from the publicity generated for and by the theatrical release (in several instances barely 90 days later). Squeezed out in the sequence, however, is much of second-run theatrical distribution.

## VII. THEATER

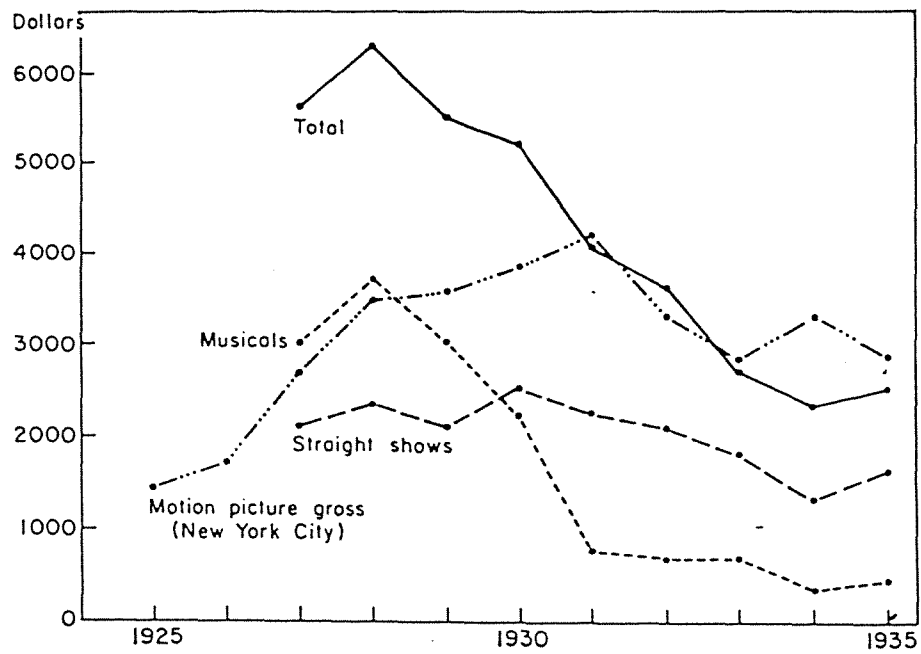
Electronic media and theater, while rivals for the attention of audiences, are symbiotically intertwined. The theater functions as one of the major training and revitalization grounds for actors, playwrights, directors and other creative and technical personnel, and it provides a testing ground for new plays and concepts.

Similarly, work on a television production -- and even on commercials -- can be a major economic help for theater artists. Television and theater thus support each other to some extent economically.

Theater in America was hit almost simultaneously by sound movies, the radio, labor unionization, and the depression. The most dramatic effect on theater in America was not television, but motion pictures -- more specifically, sound films, which were introduced in 1927 and within two years displaced silent movies. The result was a rapid decline in theater attendance. Graph 7.1 shows how rapidly film revenues rose in New York, and how theater revenues fell.

It is extraordinarily difficult to get a statistical grasp on theaters. Graph 7.2 and Tables 7.3 and 7.4 provide figures for Broadway productions and for their road shows. On the one hand, one can see a continuous downward trend in the number of new productions. In the '20s, 250 new productions a year were common. Throughout the depression, the figure was above 100. The downward trend continued slowly but steadily after 1945,

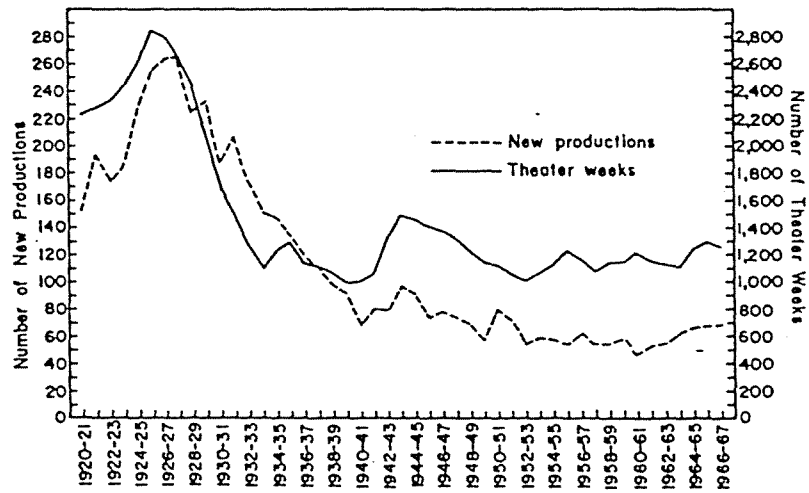




Total box office receipts, 1925 to 1935 (1963 dollars)

Moore, Thomas G., The Economics of the American Theater, (Durham, North Carolina, Duke University Press, 1968), p. 14

*Boom and Decline in New York*



Poggi, Jack, Theater in America, (Ithaca, NY: Cornell University Press, 1968), p. 61

BROADWAY SEASON STATISTICS

<u>Season</u>	<u>New York</u>		<u>Road</u>	
	<u>Ticket Sales</u>	<u>Attendance</u>	<u>Ticket Sales</u>	<u>Attendance (estimated)</u>
1973-74	\$ 46-million	5.7-million	\$ 46-million	7.4-million
1974-75	57	6.6	51	7.6
1975-76	71	7.3	53	7.0
1976-77	93	8.8	83	9.9
1977-78	114	9.6	106	11.5
1978-79	134	9.6	141	13.0
1979-80	146	9.6	181	15.4
1980-81	197	11.0	219	16.3
1981-82	223	10.1	250	15.0
1982-83	209	8.4	184	9.8
1983-84	227	7.9	202	9.5
1984-85	213	7.4	226	9.2

The League of American Theatres, 1985

<u>Season</u>	<u>Gross</u> (million)	<u>Attendance</u> (million)	<u>Playing</u> <u>Weeks</u>	<u># of New</u> <u>Productions</u>
1957-58	\$ 38	7.2	1081	56
1958-59	40	7.7	1157	56
1959-60	46	7.9	1156	58
1960-61	44	7.7	1210	48
1961-62	44	6.8	1166	53
1962-63	44	7.4	1134	54
1963-64	40	6.8	1107	63
1964-65	50	8.2	1250	67
1965-66	54	9.6	1295	68
1966-67	55	9.3	1269	69
1967-68	59	9.5	1259	74
1968-69	58	8.6	1209	67
1969-70	53	7.1	1047	62
1970-71	55	7.4	1107	49
1971-72	52	6.5	1157	55
1972-73	45	5.4	889	55
1973-74	46	5.7	907	43
1974-75	57	6.6	1101	54
1975-76	71	7.3	1136	55
1976-77	93	8.8	1349	54
1977-78	114	9.6	1433	42
1978-79	134	9.6	1542	50
1979-80	146	9.6	1540	61
1980-81	197	11.0	1544	60
1981-82	223	10.1	1455	48
1982-83	209	8.4	1258	50
1983-84	227	7.9	1097	36
1984-85	213	7.4	1075	33

stabilized in the 60s and 70s, and dropped in the most recent years to less than 40. But this can be partly explained by a trend toward longer running "safe" shows. The total number of playing weeks today is about as high as it was in 1947. Furthermore, total attendance has been at record levels in the early '80s, with 1980/1 audience almost six times as high as in 1947/8, when it had been 1.6 mil. (Baumol and Bowen 1968)

In the past decade, revenues for Broadway shows have quadrupled, while those for road-shows have almost quintupled. Off-Broadway theater has also picked up considerably, from 41 productions in 1954/5 to 131 in 1963/4, and from 1,883 performances to 9,296. (Baumol and Bowen, 1968, p. 438)

For the 84/85 season, the 300 non-profit off- and off-off-Broadway theaters in New York staged 700 plays, of which 560 were new productions, to an audience of 1.5 million. (Source: Alliance of Resident Theaters, Communication)

The decline of theater in the late '20s was steep outside of New York, too. Road shows declined dramatically; theater houses were transformed into movie halls; and regional commercial companies were disbanded or downsized to low budget "stock companies." But, similar to theater in New York, there is no indication that regional theater declined due to television. In fact, in the period of television introduction which so massively affected movie theaters, "winter stock" theater companies actually increased their number again, from 14 in 1948/9 to 30 in

1951/2 (Table 7.5-a), and summer stock companies increased from 130 in 1948 to 165 in 1962. (Table 7.5-b)

The present development and spreading of new media coincides with greater expenditures on theater, in particularly by the affluent and educated so-called "yuppie" generation, whose movie attendance as teenagers has already raised movie theater attendance in the late '70s, and which has now become the major cohort of theater goers.

In analyzing theater-attendance behavior, one needs to differentiate among quite distinct categories of audience. Audience motivation studies by the League of American Theatres and Producers for Broadway audiences show four basic types of viewers: traditionalists (33% of projected audience); enthusiasts (30%); entertainment seekers (24%); and dispassionate theatergoers (13%). The first two categories, comprising 63% of total attendance, are fairly inelastic in their theater preferences. Theater, in the future, will be attended primarily by the frequent viewers. Table 7.6.

Theater's main problems are financial and have little to do with new media. General economic and technological trends have raised the productivity of the industrial sector in the past quarter century, and that productivity increase has raised wage rates in the industrial sector and then in the service and non-profit sectors which had to match them, even though their productivity did not increase in the same way. This so-called "Baumol-effect" has been raising the cost of operation of

## 7.5a

Winter stock companies

	Number	Weeks played
1948/49	14	229
1949/50	31	372
1950/51	37	390
1951/52	30	397

a. Estimated on the assumption that the usual ratio (10 : 1) of actors to companies holds.  
 Sources: 1923/24 to 1926/27, Bernheim, *The Business of the Theatre*, p. 95; 1928/29 to 1936, *Equity*, July, 1937, p. 10; 1948/49 to 1951/52, *Equity*, January, 1954, pp. 5-13.  
 n.a. Not available.

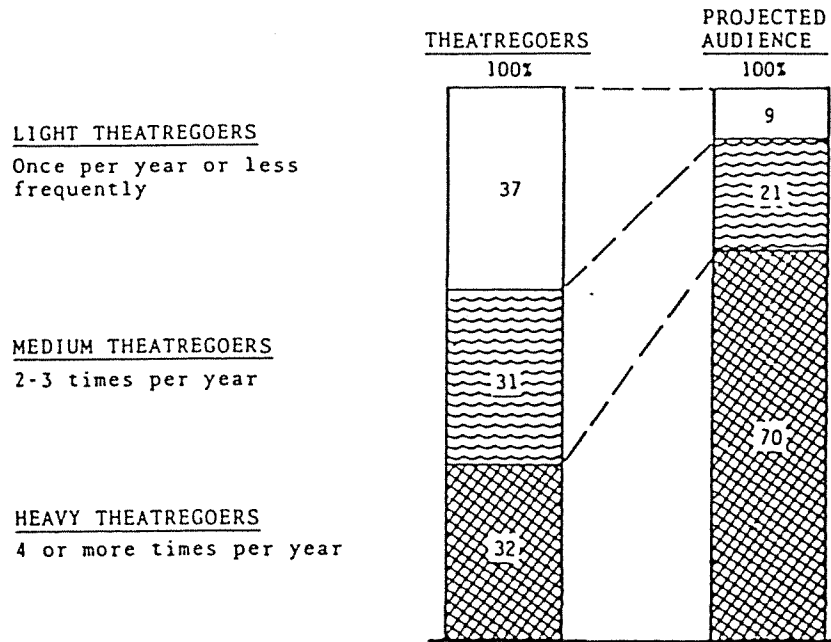
## 7.5b

Summer theaters, selected years

1940	81
1941	78
1946	99
1948	130
1949	135
1950	152
1951	141
1952	146
1953	139
1961	145
1962	165

Sources: 1940, Houghton, *Advance from Broadway*, p. 38, taken from *Equity*; 1941 through 1953, *Equity*, April, 1942, September, 1946, January, 1954; 1962 figures compiled by author from list of theaters posting bond with Actors' Equity; 1961 figures taken from *Wall Street Journal*, August 7, 1963, p. 1 (the number was quoted as having originated with *Equity*).

Moore, Thomas G., The Economics of the American Theater, (Durham, North Carolina, Duke University Press, 1968), p. 99



League of New York Theatres and Producers, "A Study of the New York Audience for the Broadway Theatre", prepared by Consumer Behavior Inc., Jan. 1980, no page numbers



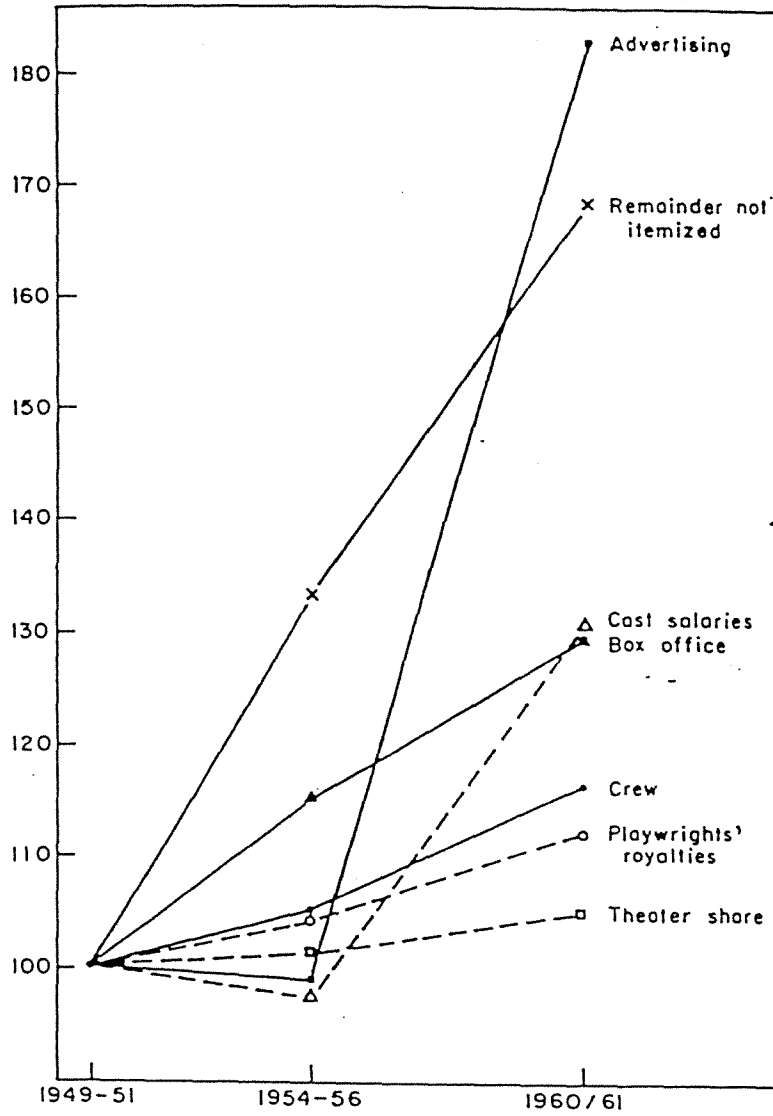
artistic institutions (Table 7.7), and has forced increases in admissions charges and government subsidies.

In Germany, the amount of governmental subsidies has been, for 1980, more than DM 72 (\$40) for each ticket sold in the 83 public theaters which account for 3/4 of all theater tickets. The contribution of ticket sales to total revenue was 16.6%. Most of the rest was governmental subsidy. (Media Perspektiven 6/81, p. 494). At the same time, audiences declined for plays, in the period 1976-82, by 8.6%. (Media Perspektiven 9/83 p. 653) During 1970-82, administrative personnel repeatedly increased by 20.1%, while actors increased by .7%, and singers declined by 4.3%. (Media Perspectives 9/83 p. 654.) In such a situation, theaters are highly vulnerable to the budget process, and their artistic independence has become subject to political interference. It is therefore important for theaters and its personnel to diversify their sources of income. Can the new media provide such opportunities?

In America, Broadway theater has traditionally had a close relation to film (Table 7.8) But this, as in the book industry, tends to shape the selection of new plays in favor of those with a certain movie and TV appeal. It also tends to favor the production of new plays, as opposed to the classics.

Generally speaking, members of the theater community as individuals have benefitted more from the advent of television than has the cultural institution of theater and drama, which has been neglected by American commercial broadcasters as lacking

## Production and operating costs | 57



Change in real weekly cost in constant dollars of selected operating items, 1949-51 to 1960/61 (1949/50 and 1950/51 = 100)

Moore, Thomas G., The Economics of the American Theater, (Durham, North Carolina, Duke University Press, 1968), p. 57

Sales of motion picture rights, 1926 to 1955 (Musicals and straight shows)

	<i>Number of sales</i>	<i>Percentage of productions sold</i>	<i>Average price paid (1947-49 dollars)</i>	<i>Average cash receipts for playwrights from an opening<sup>a</sup> (1947-49 dollars)</i>
1926-30	134	12.1	\$45,990	\$2,500
1931-35	144	18.8	50,431	4,250
1936-40	73	14.9	94,980	8,200
1941-45	100	27.7	142,729	21,300
1946-50	56	19.4	185,258	19,400
1951-55	69	27.0	112,434	16,500

a. For 1936-55, 60 per cent of average price paid for shows that opened minus a 10 per cent commission; 1926-35, 50 per cent of the net.

Source: George Middleton, *The Dramatists Guild*, p. 16.

Moore, Thomas G., *The Economics of the American Theater*, (Durham, North Carolina, Duke University Press, 1968), p. 36

mass appeal. It was hoped that new media would change that, and several cable culture channels with ambitious plans for the performing arts were started. See Table 7.9. Hopes ran high, but then CBS Cable and The Entertainment Channel (TEC) failed financially, and this was seen as proof that the performing arts could not succeed on cable television. As often, the truth lies somewhere in the middle. CBS Cable failed because it was badly planned and extravagantly executed (e.g., the company sent tins of caviar along with its promotional materials). Given that multi-channel cable systems with room for such a channel were only just evolving, CBS was also too early. ABC's "Arts and Entertainment" channel and the "Bravo" channel have been more effective and have survived so far. A&E uses performing arts shows, many of them imported from Europe (85% during the first year). For European performing companies, the diversification of the American market may be a blessing.

One impetus for the performing arts in America would be the spread of pay-per-view cable television; opera and theater enthusiasts could then pay for special events. But it is unlikely that they would do so for anything less than spectacular productions. This, again, provides incentives for the big event, the name stars, and the global appeal. The same can be said for cassette recordings of theater productions.

In all of these plans, the size of the market for television drama should not be overestimated. The attached table 7.10 of prerecorded videocassette software by program type includes drama

PROGRAM CONTENT BY TYPE  
(As a % of Total Prime Time Hours, 1982-83)

PROGRAM CATEGORY	ARTS	BRAVO	CBS CABLE	TEC	PBS
DRAMA	17.5%	1.8%	26.8%	46.9%	20.9%
Single Performance	17.5	1.8	16.7	16.3	9.7
Dramatic Series	0	0	10.1	30.6	11.2
MUSIC PERFORMANCE	31.9	26.7	23.3	0	10.4
Symphony	7.0	6.5	9.6	0	5.0
Opera	9.3	6.7	3.1	0	2.6
Dance/Ballet	7.9	8.8	7.6	0	0.5
Jazz	3.5	2.2	.6	0	1.2
Other	4.5	3.0	2.3	0	1.1
FEATURE FILM	0	69.9	13.5	31.7	0
INFORMATION (CULTURAL)	49.3	1.7	23.7	0	4.2
Arts Documentary	26.8	1.7	3.7	0	2.8
Performance Documentary	15.7	0	7.1	0	1.9
Interview	6.8	0	12.9	0	0
ALL OTHER	0	0	12.5	21.0	64.2
TOTAL	100.0%	100.0%	12.5	21.0	64.2

Waterman, David, "Public Broadcasting and the Pay Media", Draft prepared for Telecommunications Policy Research Conference, Arlie, Va., April 21-24, 1985, p. 7

Prerecorded Videocassette Software by Type of Programming (Wholesale Volume, 1983)	
Theatrical features	67%
Adult films	14
Instructional and informational	7
Children's	7
Music	4
Other	1
TOTAL	100%

Source: *Videworld*, January 23, 1984; F. Eberstadt & Co., Inc. data

Waterman, David, "Home Video and Distribution of Films", in  
E. Noam, Video Media Competition, Columbia University Press, 1985,  
p. 224

programs under "other" which accounts, together with classical music, dance, etc., for a mere 1.5%.

Similarly, audience ratings for public broadcasting cultural programs (listed in Table 7.11) are 2.2% of households for drama, according to PBS figures, compiled by Nielsen (though they reach a respectable 13% of the audience at some point.)

Furthermore, there is some evidence that the availability of cable lowers audience shares for PBS. The share of PBS viewing declines from 5% for households without cable at prime time to 3% for households with pay-cable.

In summary, one should not expect audiences for drama on cable television to be large. But a line-up that includes the Public Broadcasting System, a cultural pay-channel, a mixed movies and arts channel, an occasional play on children's channel, and Broadway-type shows on the various movie channels may have a decent chance in the future.

These developments, however, do not necessarily help all theaters. Can small regional theaters and small companies play a role in the new media? The answer is a qualified yes, but one outside the commercial system in the United States. Most cable operators are required to provide one or several free "public access" channels to local non-profit groups. In many instances, studio facilities are also provided. These channels are a potential outlet for theater groups. Among those that have made use of these opportunities are the Guthrie Theater in Minneapolis, which at some point thought about operating a

PERCENTAGE OF PRIME TIME AND AUDIENCE BY PROGRAM TYPES  
FOR A SAMPLE OF PUBLIC TELEVISION STATIONS

	PERCENT TIME	PERCENT AUDIENCE	PERCENT DELIVERY	AVERAGE RATING
DRAMA	19%	18%	- 5%	2.2
NATURE OR TRAVEL	15	25	67	3.8
CULTURE	14	10	-29	1.5
NEWS AND TALK SHOWS	13	12	- 8	2.1
SCIENCE	12	13	8	2.5
MOVIES	11	10	- 9	2.1
DOCUMENTARY	5	5	--	2.0
CONTEMPORARY MUSIC	3	2	-33	1.7
COMEDY	2	2	--	2.0
HOW TO OR ITV	1	1	--	2.2

Note: Limited to a sample of 36 local markets.

Source: A.C. Nielsen, November 1982

LeRoy, D.J., LeRoy, J.M., "The Impact of the Cable Television Industry on Public Television", Corporation for Public Broadcasting, 1983, p. 26



"second theater" for television. In New York, some artists have created "Off Off Television", producing thirteen live half-hour dramas for as little as \$65 to \$350 per half hour. (Kirsten Beck, *Cultivating the Wasteland*, 1983). CBS's caviar would go a long way. In Lafayette, Louisiana, a regular "Arts Info" public access program provides detailed information and discussion about local arts events. In Portland, Oregon, one local channel is specifically dedicated to the arts. Because of the cost of local production, some of the independent groups have begun to network and exchange programs.

New media can not only help theater, but can also harm it by undermining public television, and though is a source of subsidy for drama. The existence of a sheltered public broadcasting system permits the subsidization of arts and drama. To get a sense of the magnitudes involved: In Germany, the ARD broadcasting authorities employ 18 orchestras and 4 choirs, at a 1979 expense of DM 127 million (\$70 million), not including administrative overhead, technicians, instruments, conductors, copyright payments, and guest soloists. (*Media Perspektiven* 11/81, p. 769) It is now argued that the opening of media to new and commercial entrants would create financial pressures on public broadcasting and force it to be more oriented towards mass audiences, thus reducing the support that television provides for drama. But this argument is incomplete. It assumes that new commercial multi-channel systems would have no interest in drama productions. The British experience, with the

ITV program companies does not support this pessimism. And it assumes further that there is no public will to subsidize television drama in ways other than through providing it, in effect, with a share of the monopoly. Societies that strongly care about preserving and supporting performing arts can and no doubt will continue to do so. A proud tradition of support to theater and public service television exists in Europe, and it is likely to keep supporting televised theater. The artistic community has tended to rally around existing restrictive structure of broadcasting, because it provides them with some subsidies for their work. But it is taking a very short term view in embracing, in an artistic "Stockholm-syndrome", arrangements that restrict their ability to express their art. What helps drama most are many stages and many outlets for talent, not artificial limitation.

## VIII. BOOKS

There has always been great concern about electronic media displacing books. A scenario for such doomsday was spelled out by Marshall McLuhan; empirical data that television affects reading negatively were provided by Noelle-Neuman and Schmidtchen (1974). Children in America were observed to watch more TV and to spend therefore less time reading, and this was viewed as negative for their emotional and intellectual development, and as alarming for the future of book publishing. The perhaps single most disturbing piece of evidence were the continuously declining reading scores for American school children. Standardized test for college admission (SAT), starting in 1963, fell steadily for 17 years. Because these student cohorts had been raised with television from birth, the medium was held responsible. However, since 1980, these scores were rising again, despite increased consumption of television. Reading and television watching are not a zero sum game. The interest stimulated by a TV program can lead to the reading of a book about the subject, and vice versa.

According to one recent study at Michigan State University, 5th grade children in households with cable access read 2.6 books per month out of school, vs. only 2.1 books for non-cable children; they also read 1.6 magazines per week vs. 1.3. (No causality should be inferred.) They were also found to be more active in viewing, and to be more exploratory in program seeking.

In terms of time, they do not watch more television than

## ESTIMATED PUBLISHERS' BOOK SALES - BY TYPE OF BOOK AND MARKET, 1976-1985

MILLIONS OF DOLLARS AND UNITS

## SECTION 1A

## TEN-YEAR SUMMARY

	1976		1980		1976-1980 COMPOUND RATE OF CHANGE		1985		1980-1985 COMPOUND RATE OF CHANGE	
	\$	UNITS	\$	UNITS	\$	UNITS	\$	UNITS	\$	UNITS
TRADE										
1 DOMESTIC SALES	665.1	259.74	1170.2	389.02	15.2	10.6	2669.3	769.91	17.9	14.6
2 GENERAL RETAILERS	360.6	145.32	737.9	238.47	19.6	13.2	1931.9	530.80	21.2	17.4
3 COLLEGE STORES	76.0	33.22	91.5	33.72	4.7	0.4	214.0	70.97	18.5	16.0
4 LIBRARIES & INSTS.	122.1	33.53	184.1	42.76	10.8	6.3	253.8	50.76	6.6	3.5
5 SCHOOLS	74.7	22.92	97.9	28.64	7.0	5.7	124.2	31.90	4.9	2.2
6 DIRECT TO CONSUMER	18.3	3.12	30.1	5.01	13.2	12.6	80.4	11.26	21.7	17.6
7 OTHER	13.6	21.61	28.5	40.41	20.3	16.9	65.3	74.21	18.0	12.9
8 EXPORT SALES	41.6	16.58	59.1	18.40	9.2	2.6	141.2	33.35	19.0	12.6
9 ALL SALES	706.7	276.32	1229.3	407.42	14.8	10.2	2810.6	803.25	18.0	14.5
RELIGIOUS										
10 DOMESTIC SALES	206.1	93.86	302.4	99.53	10.1	1.5	376.5	76.67	4.5	-5.4
11 GENERAL RETAILERS	159.8	68.89	212.5	75.03	7.4	2.2	264.1	58.33	4.4	-5.2
12 COLLEGE STORES	14.5	8.05	21.5	8.70	10.3	2.0	24.1	5.85	2.3	-8.3
13 LIBRARIES & INSTS.	10.6	2.66	21.0	3.84	18.6	9.6	25.5	3.01	4.0	-5.0
14 SCHOOLS	9.5	2.62	11.8	2.79	5.6	1.6	12.5	1.82	1.2	-8.9
15 DIRECT TO CONSUMER	6.8	1.64	32.0	5.33	47.3	34.3	45.7	4.62	7.4	-2.9
16 OTHER	4.9	9.98	3.6	3.84	-8.0	-27.0	4.6	3.03	5.0	-4.9
17 EXPORT SALES	13.5	6.08	13.3	4.13	-0.4	-10.2	17.1	3.21	5.2	-5.2
18 ALL SALES	219.6	99.94	315.7	103.66	9.5	0.9	393.7	79.88	4.5	-5.4
PROFESSIONAL										
19 DOMESTIC SALES	476.5	47.21	828.5	51.83	14.8	2.4	1754.6	59.42	16.2	2.8
20 GENERAL RETAILERS	73.7	10.72	155.2	13.39	20.5	5.7	341.3	16.00	17.1	3.6
21 COLLEGE STORES	76.3	9.69	154.4	11.86	19.3	5.2	335.9	14.14	16.8	3.6
22 LIBRARIES & INSTS.	113.7	9.89	200.4	10.96	15.2	2.6	324.4	9.49	10.1	-2.9
23 SCHOOLS	17.6	1.47	24.5	1.15	8.6	-6.3	35.3	0.88	7.6	-5.5
24 DIRECT TO CONSUMER	191.3	14.40	287.9	13.74	10.8	-1.2	705.9	18.12	19.6	5.7
25 OTHER	3.8	1.04	5.9	0.73	11.6	-9.3	11.9	0.80	15.1	1.8
26 EXPORT SALES	124.9	12.46	177.7	11.02	9.2	-3.1	324.3	10.11	12.8	-1.7
27 ALL SALES	601.4	59.67	1006.2	62.85	13.7	1.3	2078.9	69.53	15.6	2.0
BOOK CLUBS										
28 DIRECT TO CONSUMER	360.2	206.80	524.0	211.08	9.8	0.5	829.8	225.91	9.6	1.4
29 EXPORT SALES	11.1	6.39	9.8	3.68	-3.2	-14.8	14.5	3.80	8.2	0.6
30 ALL SALES	371.3	213.19	533.8	214.76	9.5	0.2	844.3	229.72	9.6	1.4
MAIL ORDER PUBL.										
31 DOMESTIC SALES	361.3	39.70	551.5	51.43	11.2	6.7	1290.2	97.04	18.5	13.5
32 GENERAL RETAILERS	16.2	2.86	25.4	3.81	11.9	7.4	54.2	6.63	16.4	11.7
33 COLLEGE STORES	1.8	0.33	3.4	0.53	17.2	12.6	6.9	0.87	15.2	10.4
34 LIBRARIES & INSTS.	4.1	0.58	4.9	0.59	4.6	0.4	7.6	0.74	9.2	4.6
35 SCHOOLS	1.1	0.14	1.6	0.16	9.8	3.4	1.9	0.15	3.5	-1.3
36 DIRECT TO CONSUMER	335.1	34.12	512.4	44.45	11.2	6.8	1212.2	85.71	18.8	14.0
37 OTHER	3.0	1.67	3.9	1.89	6.8	3.1	7.5	2.94	14.0	9.2
38 EXPORT SALES	7.7	0.85	11.1	1.04	9.6	5.2	16.5	1.26	8.3	3.9
39 ALL SALES	369.0	40.55	562.6	52.47	11.1	6.7	1306.7	98.30	18.4	13.4
MASS MARKET PAPERBKS										
40 DOMESTIC SALES	389.7	452.44	679.4	533.65	14.9	4.2	1248.1	668.73	12.9	4.6
41 GENERAL RETAILERS	266.1	316.43	488.3	397.54	16.4	5.9	931.0	509.94	13.8	5.1
42 COLLEGE STORES	50.6	59.94	71.5	57.53	9.0	-1.0	124.9	67.54	11.8	3.3
43 LIBRARIES & INSTS.	6.2	5.38	8.2	5.23	7.2	-0.7	10.4	4.49	4.9	-3.1
44 SCHOOLS	38.3	32.11	55.7	32.99	9.8	0.7	68.0	27.14	4.1	-4.0
45 DIRECT TO CONSUMER	19.8	19.80	47.1	27.86	24.2	8.9	101.8	47.90	16.7	11.4
46 OTHER	8.8	18.78	8.6	12.49	-0.6	-10.7	12.0	11.72	6.9	-1.3
47 EXPORT SALES	50.1	58.37	72.7	56.96	9.8	-0.6	101.2	53.32	6.8	-1.3
48 ALL SALES	439.8	510.81	752.1	590.62	14.4	3.7	1349.2	722.05	12.4	4.1

non-cable children. They were also found less likely to regard TV as mysterious and remote, but rather to feel that children like themselves and people they know could appear on television. (Multichannel News, Oct. 1985)

Thus, despite numerous studies, the relationship of reading and television is full of contradictory observations. Perhaps it is therefore best to look at the health of book publishing. In America, the industry has been steadily growing in terms of total titles and books sold over the period of television.

In the period 1946-80, the number of new titles increased at an annual rate of 5.2% (from 9,746 to 35,651), while in the "TV-less" period 1911-45 it had actually declined by an average of 0.8% per year, from 11,200 down to 8,496. (Source: Paine Webber, cited in Noble 1982, p. 100). By 1980, more than 538,000 books were listed in print. For industry trends see Table 8.1.

American publishing companies increased from 655 in 1947 to 1,652 in 1977. (U.S. Census, Noble, in Compaine et al, 1982, p. 105). During the period 1968-81, an average of 50 new books publishers were formed per year, while an average of 6 ceased operations, (Literary Market Place, Noble p. 106). In dollar terms, book sales are about one quarter of one percent of the GNP, and this percentage has remained remarkably stable since 1960. In the 1930s and '40s it had been only about half as large. Of course, it is possible that the growth rate of books would have been steeper without television.

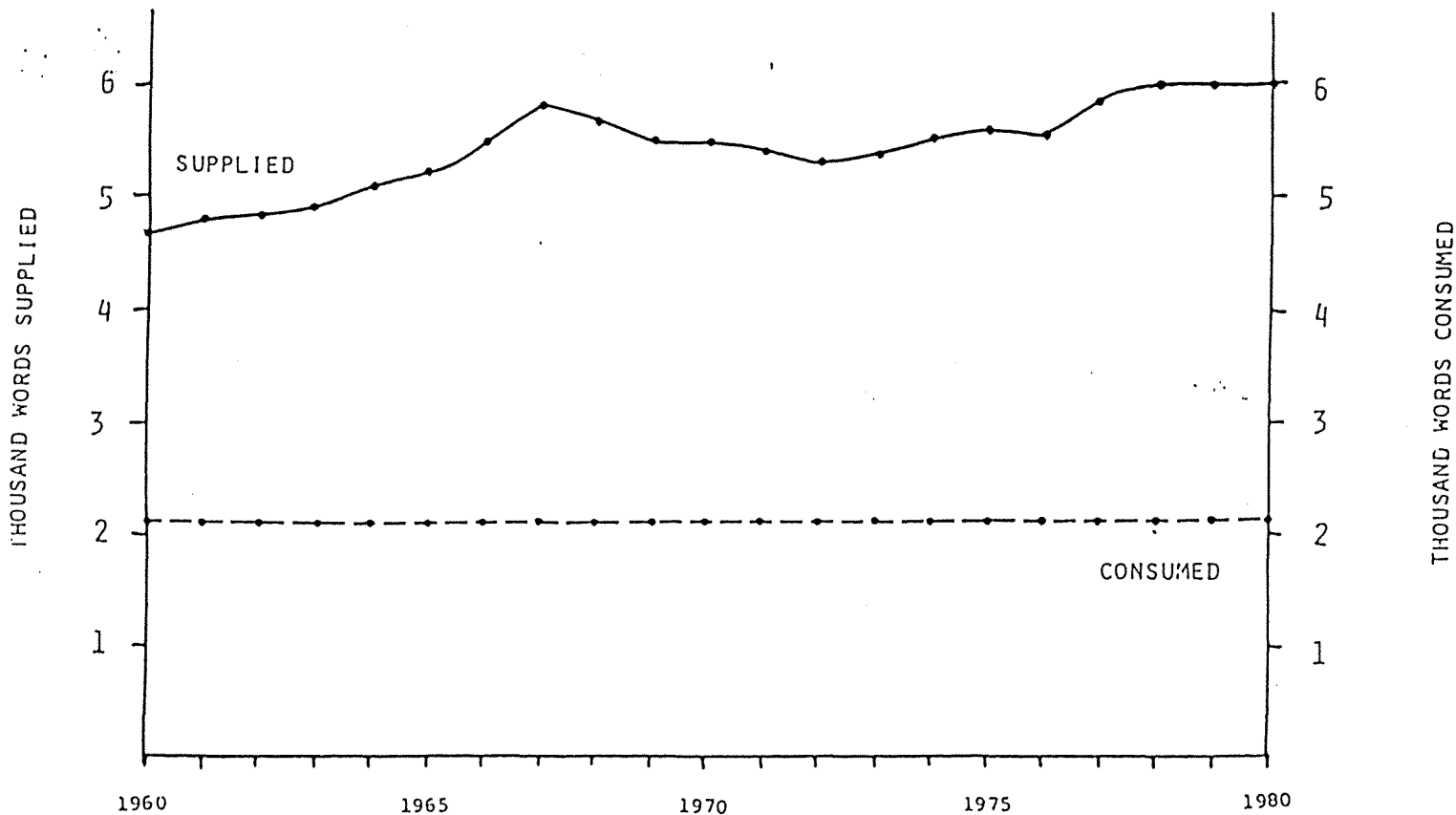
Of the segments of publishing, the consumer market has not been a major growth field. Pool and Newman, in their study of information flows into the home, find a stable consumption of about 2,100 words per person and week over the two decades 1960-1980. (Table 8.2) Supply (i.e. books entering the home) has risen slowly to about 6,000 such words per person and week. The high ratio between consumption and supply of book-words shows that people do not buy books significantly above what they actually read, in contrast to other media, perhaps because of the high cost per word in books. If publishers could affect this ratio to be more like that of other media, they would greatly expand their market. Book clubs are apparently one way to do so.

In the non-consumer segments of books, publishing has grown rapidly. In the 1970s, textbooks have grown by an annual rate of 11% to 27% of all revenues. Technical, scientific and professional books grew by 13% annually to a share of 14%. Religious books had an even steeper growth rate of 15% with a 5.0% share. The shares for general reference, tests, and university presses was 8% (Noble 1982). None of these segments, totalling almost 54% of book publishing, is particularly affected by television media competition. However, the publishers of trade books, who are the most visible part of book publishing, are also the most vulnerable. Operating margins, which in 1980 were over 20% for college textbooks, were only 1.4% for mass market paperbacks (and falling), 3.8% for adult paperbound trade books, and 5.6% for adult hardcover trade books--three of the lowest

BOOKS

8.2

42-a



Neumann, W.R., de Sola Pool, I., "The Flow of Communications Into the Home", The Future of the Mass Audience Project (MIT), Preliminary Release, 1984

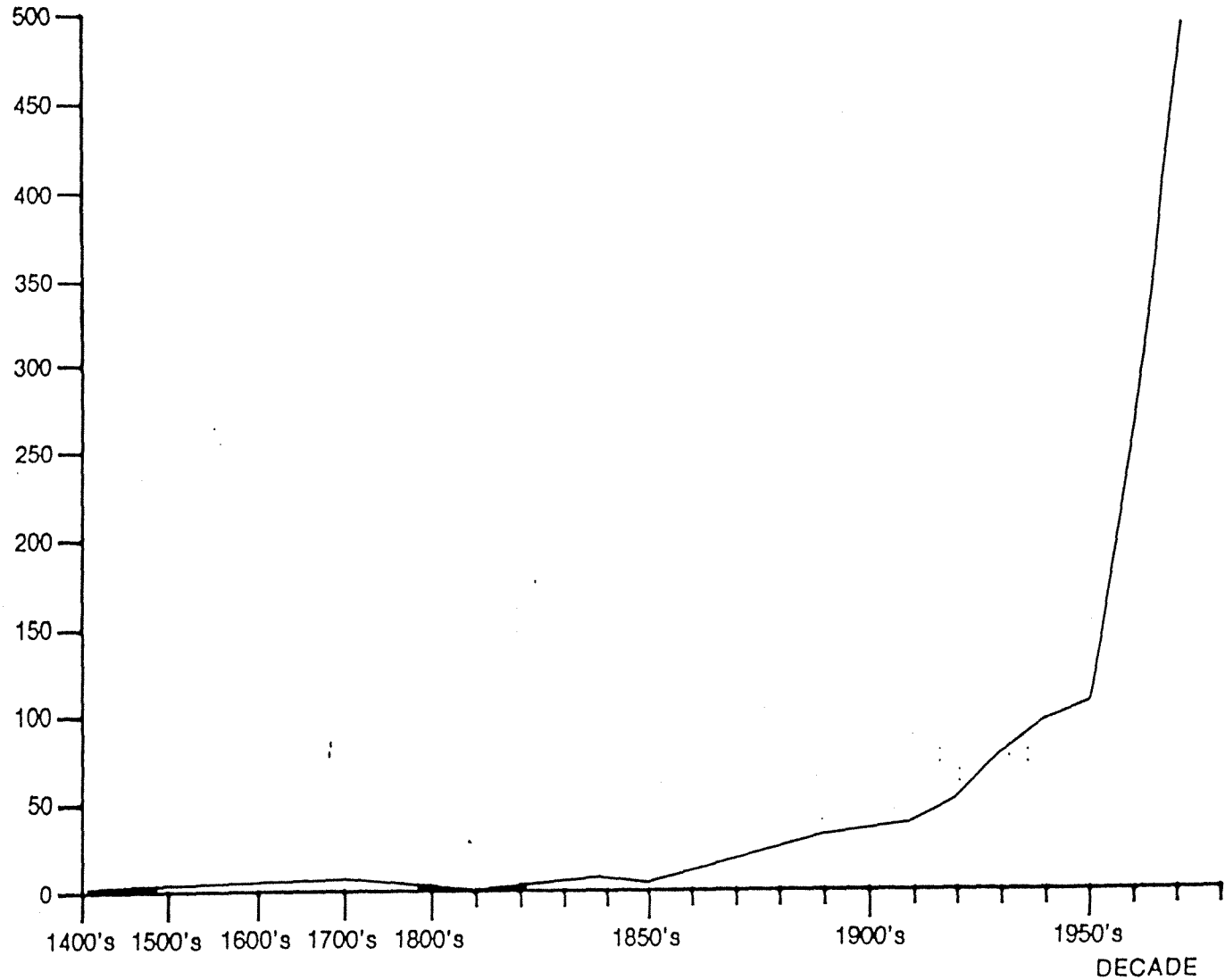
four categories. (Noble p. 113) The good news is that small publishers have not been pushed aside by large houses. According to US Census of manufacturing data, these publishers have grown in 1972-1977, a period of economic recession, from 604 to 1001. (Table 8.3) There is, of course, attrition to their number. Their sales per employee are higher than for the largest firms, and their average value added per employee is comparable. (Table 8.4) A somewhat different picture is found by two other studies whose results are also listed in the table. They find, for 1980, disadvantages to the smallest size of firms, possibly due to their relative newness. While many of them do not survive, the high level of new entry suggests an overall health of small publishing as a whole.

Book publishing, as discussed, becomes increasingly embedded in a general media system. Because the low cost of a book production, relative to a film or TV program, and the low payment to the authors (there is no union protection for novelists), books are an effective and low-cost testing vehicle for new ideas and plots. Table 8.5 shows that more than 40% of U.S. feature film screenplays are derived from novels and short stories. In accordance with the general trend towards integrated media, major television firms have established a presence in book publishing. The relationship has benefits for publishing, too, because the potential for a subsequent film encourages the writing of books. Books also receive promotion through television, and a



<u>Decade</u>	<u>No. of Pubs. in 1981 LMP</u>
1970's	466
1960's	273
1950's	108
1940's	98
1930's	79
1920's	53
1910's	38
1900's	34
1890's	32
1880's	27
1870's	20
1860's	13
1850's	5
1840's	9
1830's	7
1820's	3
1810's	1
1800's	2
1700's	6
1500's	1
1400's	1
No date given	<u>132</u>
TOTAL	1,468

## PUBLISHERS



Doebler, P.D., "The Convergence of Small Publishers, Expanding Retailers and Technologies", in Book Industry Trends, from "'Business as Usual' to ???", Book Industry Study Group, Research Report #11, 1981, pp. 1-51, p. 31

ensus of Manufactures:

Establishment	No. of Estab.	Employees /Estab.	Average Shipments /Estab.	Average Shipments /Employee	Year-End Inventory % Ship.
4 employees	1,001	1.3	102,797	79,154	22.0
9 employees	210	6.7	503,333	75,500	20.4
9 employees	186	14.0	948,925	67,885	25.3
9 employees	146	31.5	2,431,509	77,174	21.7
9 employees	87	70.1	4,996,522	71,262	26.1
1 employees	56	148.2	9,967,857	67,253	24.6
employees	30	336.7	33,420,000	99,267	18.8
employees	22	604.5	57,740,909	95,511	16.4
employees	7	1,685.7	112,571,420	66,780	22.7
Establishments	1,745	34.1	2,747,221	80,570	20.7

Huenefeld Survey:

Firm	No. of Firms	Full-Time Employees /Firm	Part-Time Employees /Firm	Average Sales /Firm	Average Sales /Empl. (FT)
100,000 sales	58	2.3	2.1	43,000	18,675
300,000 sales	48	3.7	2.9	191,000	51,722
1 million sales	52	8.6	4.5	569,000	66,008
1 million sales	56	22.6	4.3	1,697,000	75,107
1 million sales	15	75.9	8.3	7,071,000	93,166
	229	14.1	3.8	1,031,000	73,121

	Inventory % of Sales	Before Tax % Profit	Average Annual New Titles /Empl. (FT)	Average Annual New Titles /Firm
100 sales	103.6	-24.0	1.83	4.21
100,000 sales	53.6	3.6	2.35	8.70
1 million sales	41.0	7.2	1.77	15.22
1 million sales	31.0	7.4	1.18	26.67
1 million sales	27.6	6.5	.69	52.37
	33.0	6.7	1.16	15.30

Statistical Survey:

Period	No. of Particip. Publishers	Average Sales/ Publisher	Yr-End Inventory % Sales	Before Tax % Profit
100 sales	13	4,269,231	41.6	1.6
1 million sales	13	15,130,769	30.5	9.8
1 million sales	3	62,100,000	25.3	8.5
	29	15,120,689	29.4	8.2

"The Convergence of Small Publishers, Expanding  
 Technologies", in Book Industry  
 'Usual' to ???", Book  
 11. on 1.5"

**Analysis of Source Materials for U.S. Feature Film Screenplays, 1935-1954**

	Original Screen Stories	Stage Plays	Novels	Biographies	Short Stories	Source Unknown	Miscellaneous
1935	47%	8%	27%	1%	7%	5%	5%
1936	68	7	17	--	7	--	1
1937	64	6	17	2	8	2	1
1938	58	6	26	--	10	--	1
1939	56	6	22	3	10	2	1
1940	62	10	21	2	4	--	2
1941	63	10	10	1	15	1	1
1942	73	6	10	1	5	2	2
1943	75	6	10	1	1	4	4
1944	73	6	11	1	2	2	5
1945	65	7	15	--	3	1	11
1946	61	5	15	--	2	1	15
1947	58	4	22	--	1	3	13
1948	56	6	18	--	5	2	12
1949	68	4	18	1	4	--	5
1950	73	4	16	1	2	--	4
1951	67	6	16	1	6	--	4
1952	67	5	17	--	6	--	5
1953	64	5	20	1	5	--	5
1954	58	4	20	--	4	--	14
1955	52	8	24	1	9	--	6
1956	51	6	21	2	12	--	8
1966	48	4	37 <sup>a</sup>		6	--	5
1967	55	8	32 <sup>a</sup>		--	--	5

Sources: Motion Picture Association of America data: 1935-1948: reprinted in Handel (1950), p. 22; 1949-1954: Cogley (1956), p. 281; 1955-1967: Motion Picture Association of America annual reports.

Notes: Figures may not add to 100 percent due to rounding. (a) The category given is "Books."

Sterling, C.H., Haight, T.R., The Mass Media: Aspen Institute Guide to Communication Industry Trends, ( New York: Praeger Publishers, 1978 ), p. 295

symbiosis has developed between authors and television talk shows with their insatiable hunger for subjects and experts.

This provides books with a forum for introduction and promotion that reaches a much larger audience than before, and familiarizes it with new books, concepts, and authors; in the traditionally opaque book market, this is of great importance. On the other hand, the television connection favors the publishing of works that lend themselves to a capsule discussion on a popular program ("Franklin and Eleanor", as opposed to "Roosevelt and Dewey"). It favors the author with a winning personality and the ready solutions, and shifts the success of a book away from the mediating function of the book critics with their subject-matter expertise and standards of reference.

Outside of trade books, scientific and technical literature has expanded enormously. The economics of this market segment are peculiar; for many scientific authors the writing of books is an input to professional recognition, and the supply of manuscripts is therefore relatively independent of demand. Such a system has led to a vast increase of scientific publications. The sheer output threatens to undermine traditional publishing, as libraries cannot afford the ever-rising quantities and prices of books written for ever more specialized audiences.

Table 8.6 shows that the average library acquisition price index more than doubled during 1974-1982 for American hardcover books and somewhat less than doubled for foreign books. Budgets in 1982 were only 1.7 higher than that in 1975, while acquisition

Average Prices and Indexes for College and University Library Acquisitions, FY 1975-1983

Year		U.S. Hardcover Books		U.S. Periodicals		Foreign Monographs <sup>1</sup>		Library Acquisitions Price Index <sup>2</sup>
Calendar	Fiscal	Av. Price	Index <sup>3</sup>	Av. Price	Index <sup>3</sup>	Av. Price	Index <sup>3</sup>	
1974	1975	\$14.09	100.0	\$34.55	100.0	\$ 6.42	100.0	100.0
1975	1976	16.19	114.9	38.94	112.7	7.59	118.3	114.7
1976	1977	17.20 <sup>4</sup>	122.1	41.85	121.1	7.91	123.2	122.0
1977	1978	18.03	128.0	45.14	130.6	8.89	138.5	130.4
1978	1979	20.10	142.7	50.11	145.0	9.41	146.6	144.0
1979	1980	22.80	161.8	57.23	165.6	11.52	179.5	165.6
1980	1981	23.57	167.3	67.81	196.3	13.05	203.3	181.4
1981	1982	26.88	190.8	73.89	213.9	13.84	215.6	201.5
1982	1983	30.59	217.1	78.04	225.9	11.91	185.5	215.0

<sup>1</sup>All hardcover books, paperbacks, and pamphlets purchased during the fiscal year by the Library of Congress from approximately 100 foreign countries

<sup>2</sup>Weighted average based on the estimated proportion of the total acquisitions budget expended for each category. Weights used—U.S. hardcover books, 55 percent, U.S. periodicals, 30 percent, and foreign monographs, 15 percent

<sup>3</sup>Indexes are not fixed-weight indexes; they reflect changes in the type and mix of books and periodicals from year to year. The fiscal year index refers to average price in the previous calendar year due to the normal time delay between published date and purchase.

<sup>4</sup>In 1976, *Publishers Weekly* reported a book price of \$17.39 for an 18-month period (1976-1977). An adjusted value of \$17.20 for calendar year 1976 was determined from the trend line.

Source: Prices of hardcover books are published in *The Bowker Annual of Library & Book Trade Information*, R. R. Bowker, New York, based on books listed in the Weekly Record section of *Publishers Weekly* for the calendar year with an imprint for the same year. Not included are mass market paperbacks, government documents, and certain multivolume encyclopedias. U.S. periodicals are priced by the F. W. Faxon Co. and reported by F. F. Clasquin in the October issues of *Library Journal*. Foreign monographs are priced according to an unpublished price series prepared by the Library of Congress.

Bowker Annual of Library & Book Trade Information, 29th Edition,  
edited by Julia Ehresman, (New York: Bowker, 1984), p. 392

costs rose by 2.15 per unit during the same time. As a result, library acquisitions of books have dropped absolutely, in the face of increasing production of new titles. (Table 8.7) Compared with 1978/9, book acquisitions were lower by 9.1% in terms of volumes, and 11.6% by titles. Federal government grants fell in that period by 23.2%, though their share in total library operating expenditures had been only 1.6% to begin with.

Information technology, of course, can potentially reduce the cost of cataloging, etc., but the setting up of these systems is an expensive investment. Computers were introduced first as cataloging and reference tools. It was only a step to their interconnection by telephone lines to distant bibliographical on-line data bases, and to the beginnings of an electronic publishing industry. A large number of data bases are publicly accessible today; the largest ones are listed in Table 8.8.

At present, electronic publishing does not affect traditional book publishing in a meaningful way. But the handwriting is on the wall. Already, the Lexis and Westlaw on-line legal data bases are used by a large number of law firms as a substitute for costly law libraries. Similar development will occur elsewhere, due to the supportive trends in the cost of computer memory, communications, terminals, and software friendliness. In the future, many libraries, instead of buying costly books and storing them on the shelf, will provide terminals for access to the data banks of central library systems or of publishers themselves. Users, who at present typically use expensive books

Acquisitions of Library Materials by Type in College and  
University Libraries, 1979 and 1982

Type of Library Materials	(In thousands)		% Change
	1978-1979	1981-1982	
Periodical subscriptions	4,749	4,890	+3.0
Book volumes	21,460	19,507	-9.1
Book titles	14,405	12,735	-11.6
Government documents (in separate collections)	7,270	6,303	-13.3
Microforms—book titles	3,275	3,054	-6.3
Microforms—periodical titles	282	430	+52.5
Microforms—other	21,609	26,375	+22.0
Audiovisual materials	2,089	1,621	-22.4
All other library materials (titles)	5,328	4,690	-11.9

Bowker Annual of Library & Book Trade Information, 29th Edition,  
edited by Julia Ehresman, (New York: Bowker, 1984), p. 395

Number of Customers for Business Application Programs  
Compared to Subscribers for Leading Online Services, 1983

Program	Software		Online Services	
	Unit Sales	Distributor	Customers	
WordStar	800,000	Dow Jones	120,000	
VisiCalc	700,000	CompuServe	93,000	
SuperCalc	350,000	Quotron	61,000	
PFS:File	250,000	Source Telecomputing	46,000	
1-2-3	200,000	Dialog	45,000	
dBASE II	150,000	Reuters	40,000	
Total, top 6	2,460,000	Total, top 6	405,000	
Cumulative total, all business programs, 1981-1983	4,750,000	Combined total, top 26 U.S. services	635,000	

Source: Communications Trends, Inc.; Knowledge Industry Publications, Inc. All estimates are preliminary.

Siegel, Efram, "The Software Publishing Phenomenon: New Perspectives on Software and Electronic Publishing", in Greenberger, Martin, Editor, Electronic Publishing Plus, ( White Plains, New York: Knowledge Industry Publications, 1985 ), p. 105



at zero marginal cost, will be charged on the basis of usage, and end up paying substantially more for their research. For publishers this is a mixed blessing. Production costs for a "book" will fall, and the long production time shortened; but the fairly automatic number of books sold to libraries will decline, particularly for reference materials.

America and Europe have had different approaches to electronic publishing. In Europe, the development of sophisticated interactive videotex systems has been emphasized, such as Prestel, Antiope, and Bildschirmtext (Btx), which provide graphics and color, and are centered around household television sets. The problem is that videotex has proven to be of limited interest to consumers. For the foreseeable future, it is a business service, although this seems sometimes embarrassing to admit, given the large public subsidies involved. To business users, on the other hand, the graphics and colors are of little importance. Most significant are an ability to integrate the data into existing computer and word processing software, to use office terminals, and to have a speedy transmission, ease of search, and printing capability. This has led to technically simpler data bases that are accessible through micro-computers which have proliferated in offices. These smart terminals can also put the information to subsequent use. In effect, the American approach (to call it "policy" would be an exaggeration), is to let electronic information publishers take the lead and develop as they please, based on any hardware that is available

now or in the future, and with no controlling or operational role for the telephone carriers except for their common carrier function.

Electronic publishing raises issues of domination by the United States. There are important economies of scale due to the high fixed and low marginal costs. Hence, there is an advantage in being first. This, together with the continuously falling cost of data communication, gives American electronic publishers advantages in international markets, and has led to disputes over the freedom of information flows. It is highly improbable, however, that Americans will dominate electronic publishing in Europe, because it is such a by-product of regular publishing. American data-base providers may have a lead in country-neutral scientific information such as for chemistry or medicine. But most information tends to be country-specific, and local publishers can serve these needs best.

In parallel with the trend toward integration of media production, what used to be book stores are becoming "information stores." They begin to sell video recordings, computer software, electronic games, and sometimes concert and theater tickets. Other logical extensions are the sale of subscriptions to on-line data bases (see Table 8.8), and the rental of access terminals. Such bookstores could also provide, for specialized materials, print-out facilities for "instant books" which are electronically ordered and transmitted.

## IX OUTLOOK

Among the major fears accompanying the emergence of "new media" is the fear that they will fatally harm the traditional carriers of culture such as books, theater, and film. Are these fears well-founded? This paper has looked into this question. It arrives at an optimistic answer, at least for the United States. Both theater and film have declined from once central roles, but that decline was due to the introduction of, respectively, sound movies in the 20s, and television in the 40s and 50s; the new media are more likely to be supportive than destructive. Film production, in particular, gains from an increase in the outlets for its creations, its ability to sequence its release for different audiences, and its increased revenues. As a consequence, the diversity and quantity of film production should increase substantially. American theater has weathered its earlier decline. It attracts a committed audience, and the demographic trends are in its favor, so that it is holding its own. Book publishing has been growing largely independently from the new media, and its problems are similarly independent of them.

Merging technologies and economic incentives lead to increasingly integrated mass media. This shapes publication and production preferences towards certain types of works with appeal across media and countries. The total size of the media industry is growing rapidly. Table 9.1 shows how total media expenditures

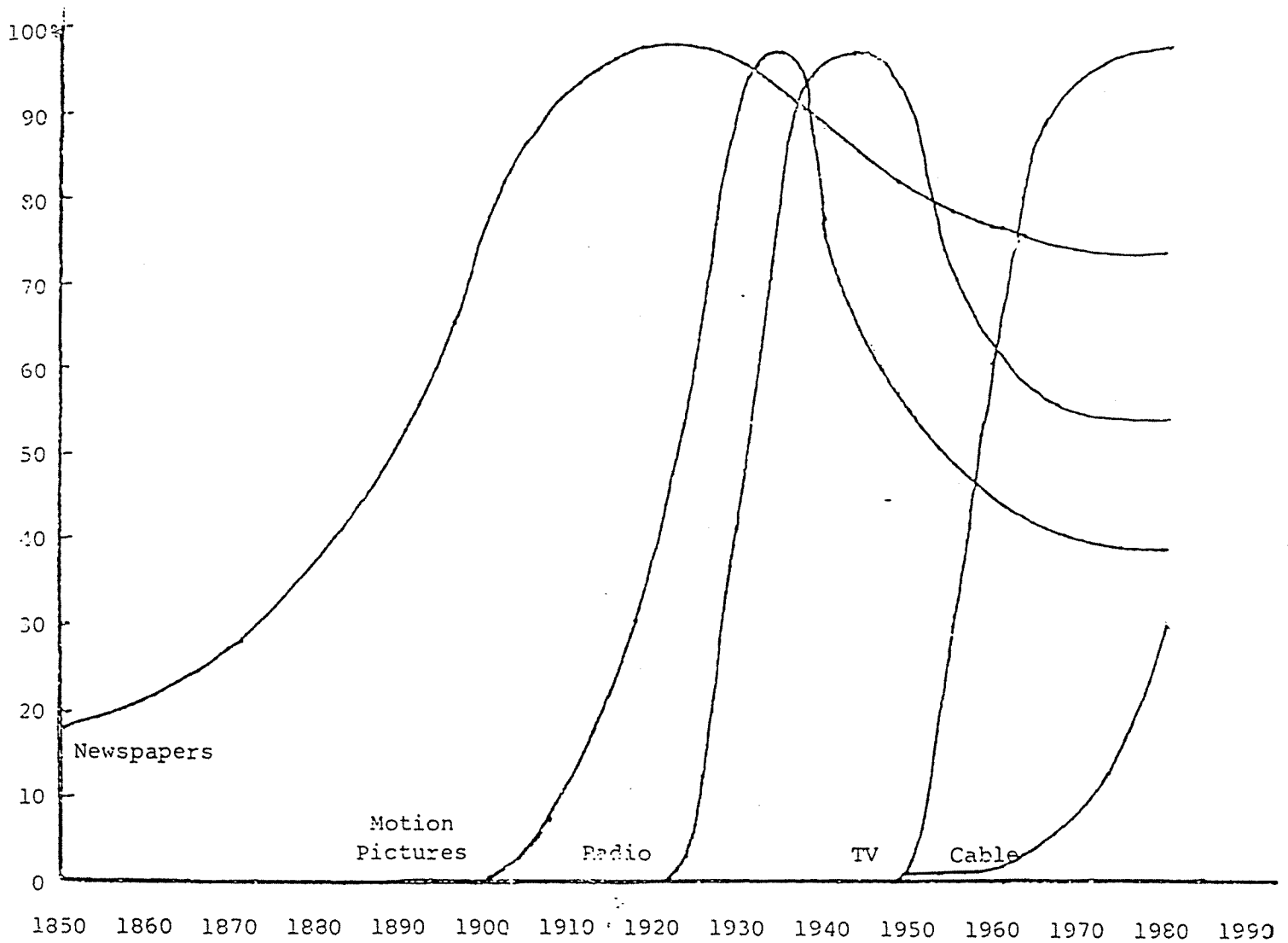
## Revenues of the Media Industry, 1972 and 1982

	1972	1982	% change
	(in billions)		
<b>Media and Entertainment</b>			
Broadcast Radio	\$ 1.4	\$ 4.0	185%
Broadcast TV	3.2	11.0	244
Book Publishing	2.9	7.2	148
Cable TV	0.4	2.4	500
News Wire Services	0.1	0.3	200
Motion Picture Distribution and Exhibition	1.4	4.6	229
Newspaper Publishing	8.3	21.8	163
Periodical Publishing	3.5	10.8	209
Total	\$21.2	\$62.1	193
Present of GNP	1.8	2.0	
<b>Consumer Electronics</b>			
(television and radio receivers, home video recorders, phonographs and hi-fi equipment)	5.4	\$11.0	104
Book Printing	0.9	2.6	189
Grand Total	\$27.5	\$75.7	175
Present of GNP	2.3	2.5	

Sources: U.S. Dept. of Commerce, Bureau of Industrial Economics, *U.S. Industrial Outlook, 1983*; annual; estimates of Program on Information Resources Policy, Harvard University.

Compaine, Benjamin M., "Players and Stakes in the Media Industry", in Greenberger, Martin, Editor, Electronic Publishing Plus, ( White Plains, New York: Knowledge Industry Publications, 1985 ), p. 74

### The Growth and Decline of American Mass Media



Neuman, Russ, "The Fragmented Audience", The Future of the Mass Audience Project (MIT), 1983, p. 13