

New Media in Their Local Context:
The American Experience

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I. Introduction

Most observers are familiar with the broad outline of American media developments in recent years--the rapid spread of cable television, the several dozens of satellite channels, the "back yard" direct satellite reception. They are also familiar with the increasingly laissez-faire environment of American electronic media, and they worry about the struggles of American media and its effects on other societies. They often see it as a manifestation of American muscle-flexing in other fields, embodied by a President equally at home in Hollywood and the Pentagon. The changes in American media are then interpreted along global and "macro" lines. But there is another dimension--the local and "micro" one--to these changes, and they have received little attention in Europe.

One cause for this selective attention is that the European debate over new media issues has been so ferociously partisan and ideological. Media politics is power politics. European participants in their own domestic debates looked at America for "lessons," positive or negative; they usually found whatever they were looking for to support their argument in their home country. I am reminded of the former French Minister of Culture Jack Lang, who opposed permission for the sale of books at discount prices, (which most bookstores did not like) with the observation that in all of New York, there were only five

bookstores left. [Chronicle of Higher Education, 1984.] Within 100 yards of Columbia University there are six bookstores alone.

II. Diversity

One frequent finding was that "American television is terrible." This phrasing is revealingly pre-Marshall McLuhan. Could one conceive of the statement, "German publishing is wonderful?" There are too many hundreds of publishers and thousands of books and magazines to make such a generalization meaningful. The truly historic significance of media trends, exemplified by American developments, is that they end electronic mass communication's status as a medium of scarcity. Hence,

Observation #1: Television is becoming video publishing.

Traditional broadcasting is simply one form of delivery of video material. In the United States there are now several dozen program networks using satellites. Video-cassette recordings, microwave broadcasting (MDS), etc., add technical options for delivery. The days of dominance by the three commercial networks are fading; this is a slow but steady process of erosion. The three networks and their management, secure in their organizational status, have not exhibited much capacity for self-reform. This is one reason why others have taken over ABC, NBC, and nearly CBS. People are discovering that it is not all that difficult to operate a decent network in terms of technology of programming. What is difficult and expensive is to get cable systems to carry a new channel when they have only twelve

channels to fill, of which only three or four may be discretionary to the cable operator. To be picked by such cable operators thus requires a large audience share, much larger than necessary to simply break even for the cost of distribution and programming. And to get a large audience share requires expensive marketing. That is the main barrier to entry. But the days of the twelve channel system are passing, too, and with it much of this bottleneck.

In the long run, the result will be a heterogeneous collection of program distributors vying for audiences, some specialized, others general (including in particular the three major networks); some are economically supported by advertising, others by subscription (pay), others by "ticket" sales for events (pay-per-view) and still others subsidized by governments, churches, and other institutions.

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.

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 book publishers habitually do.

Thus, the program diversity on mature cable systems is now much greater than the one that existed in earlier years, particularly for the smaller cities. The following Table 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 a total of 35.

Our Center for Telecommunications and Information Studies at Columbia has conducted 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

Table 1

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.

eljanovski, 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

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.

In the last fifteen years, Tulsa added two broadcast stations to the previous four, and built a thirty-five channel cable. Total program hours increased eleven-fold. 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: 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. 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. Clearly, the market alone does not serve all equally well.

III. Commercialism

Observation #2: Multi-channel television means a much greater role than before for commercial television, in those countries where free speech and relatively free markets exist.

The corollary of these developments for other countries

is that unless they seal themselves off, Albania-style, from fundamental trends in information distribution, and as long as they otherwise follow, more or less, the principles of free markets and free speech, commercial television is unavoidable. If (a) television becomes ever more like publishing, and (b) publishing is partly or largely commercial, ergo television will become partly or largely commercial, too.

The emergence of multi-channel option shifts the burden of proof. It is one thing to allocate the only three available TV channels to governmental organizations and to exclude private interests, because the media power of the lucky "winners" would be unacceptable. But it is another matter to have the same policy when 35 channels are available. Now, to have all of them controlled by the political process seems excessive and even potentially dangerous, while the private media power can be diffused. But this is of course the part that people like least. They have visions of a TV-Bild-Zeitung, and of information power exercised by business interests. But it is important not to miss the forest for the trees. That business tries to capitalize on change does not make the change itself negative. What is so great about a system that requires dozens of millions of people to watch the same program at the same time if they want to watch anything? What is so great about a system which constricts the creative expression and desire to communicate of dozens of millions of people into three or four channels? From the point of view of the late medieval Catholic

church, Johannes Gutenberg was a disturbing element, motivated by money, not higher principles; from today's hindsight, Gutenberg led to people like Hearst, Springer and Murdoch. But he also led to reformation and enlightenment, which eliminated the church's monopoly position over religious communications. In short, one has to take a long and broad view.

Joseph Schumpeter's phrase of the "creative destruction" of capitalism is apt here. In that light, it is useful to remind ourselves of the dangers to culture earlier "new" media had caused. 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, 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.

IV. Globalism

Observation #3: Media distribution is becoming integrated, and commercial media products are becoming more global and less local.

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 in several ways. 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.

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 America, 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 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.

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 thus contributes to inequality, no question about it. But a historic perspective is necessary. 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.

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, Bertelsmann 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 those 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, regional, or local culture are not attractive under such incentives in the way that works of a global appeal are, which can be distributed internationally. Where a global audience exists, commercial firms are also more likely to provide productions of a serious nature, heretofore the domain of public broadcasters.

V. Location

Does this globalisation and integration of media spell the doom of local forms of electronic communications? I do not believe so.

Observation #4: The potential for local communications is greatly enhanced. The reality depends on the financial support mechanism.

The globalisation of media affects mostly the commercial sector. For local communications, new forms of distribution emerge that substantially reduce the bottleneck that prevented local electronic communications in the past.

A. The Commercial Sector in Local Communications.

1. Video Cassette Recordings

Video stores provide cassettes or films that appeal to the neighborhood audience. For example, hispanic areas can get Spanish language programs, etc.

2. Local Commercial Broadcasting.

Local television has existed in the U.S. from the beginning, since the licensing system purposefully stressed localism as a major goal. In consequence, there are almost a thousand television stations in existence, all of them restricted in power antenna height, and range. This is very different from Europe, where most countries have highly centralized broadcast systems. Ownership limitations kept, until last year, total ownership of stations to 7 per owner; it takes more than one hundred to cover the entire country. This policy had been chosen to encourage local commercial media, and to reduce control by large national media firms. There were nationwide suppliers (the three networks), but they had no formal control over the programming of their "affiliates," and in any event they could provide programs, by regulation, only during part of the day, (e.g., three hours in the evening prime-time). The local stations have blocks of time which they fill as they please. This includes, in particular, local news, often of several hours a day total. There are also "independent" stations not affiliated with networks. All TV stations have to preserve their goodwill in the community, and thus cover local issues through documentaries, talk shows, interview programs, etc. This used to be a formalized requirement by the FCC. Even without formal requirement, there are few exceptions to compliance.

Cable television provides only islands of multi-channel viewing opportunities, leaving the surrounding areas dissatisfied

with its inferior status. Partly in consequence, in the recent decade several hundred new television stations have been licensed by the FCC in the United States. They are for the most part not network affiliated, and hence do not follow national network programming. While they provide many old films and syndications, many differentiate themselves as "local" stations. In the shaping of their schedule they can aim for the tastes of the local rather than national audience, even when they select rather than produce programs.

3. Low-Power Television. Low power (LPTV) licenses were awarded since 1984 by the FCC, which aims at 4000 LPTV stations nationally. It received more than 28,000 applications for these licenses, before its computer broke down and it froze applications. (Low power = 10 watts for VHF, 1,000 watts UHF.)

LPTV requires only a relatively small investment; most cost estimates are from \$50-\$200,000 for a fully equipped stations and transmitter, not much more than a gas station at a decent location. In consequence, a heterogeneous collection of applicants emerged. They include, in addition to a stampede of entrepreneurs, also the United Auto Workers (a major labor union), which applied for 23 stations for a national network to reach members. Other applicants were ethnic and religious groups, citizens associations, television activists, entrepreneurs, and large media firms. Thirteen percent of applications came from non-profit groups. In Minnesota, a group of Chippewa Indians wanted to serve their community. The FCC

grants about fifty licenses each month.

The creation of LPTV, incidentally, is an illustration for the assertion that new media issues are most usefully analyzed as establishment-versus-newcomers rather than private-versus-public. The established private broadcasters had for many years opposed any opening for commercial LPTV. They were, however, agreeable to non-commercial LPTV. The FCC's deregulatory policy here thus was pro-competition, but not pro-broadcasters. The political impetus was provided by small communities and rural states. The Corporation for Public Broadcasting, non-profit TV's umbrella organization, also opposed LPTV as a potential competitor for funding.

LPTV licensees (of which there are now about 1200, and 400 on the air), have often not been particularly successful commercially. This has led some people to refer to LPTV as "low profit television." Partly this is so because the FCC has granted licenses first in rural areas only. (200 LPTV licenses are in Alaska alone), leaving areas of denser populations for later. Another reason is the lack of experience of the new operator. (Established media firms have less chances in the lottery; minorities such as blacks or hispanics get a preference by doubling their odds in the lottery. Small businesses also get a preference.) A market of at least 50,000 is considered necessary. A 30 second advertising spot sells for as little as \$4, and can thus attract the local hardware store.

But it take a lot of hardware stores to pay the rent. A

survey among LPTV operators showed the average annual operating budget at \$185,000. Eventually, many of these stations will carry syndicated programs, or be linked as national networks. But there is also likely to be community programming involvement among those who manage to survive the first few years. They show local high school games or local talk shows, run a "TV trader" garage sale show in which people can show the item they wish to sell on TV, etc. They also provide jobs for young local media talent eager for real on-air experience which bigger stations will not provide.

All in all, the impact of commercial LPTV should not be exaggerated. It is a fledgling service and will require time. Nevertheless, the addition of thousands of local stations adds to local program variety and to communications access.

4. Cable Television.

In cable systems' broad programming mix an element of local programs adds to the channel spectrum which they sell to subscribers. There are two forms of commercial local programs (non-commercial will be discussed later).

(a) Local-Origination Channels (LOs). Some, but not all, cable operators provide one or two channels which they program themselves, as opposed to carrying satellite and other pre-packaged channels. There are three reasons for these local cable channels. They provide a local advertising medium; they create visibility and interest in cable; and some are required by the municipality which licenses the cable operator.

(b) Leased Channels. Many cable systems have one or several channels which must be available for commercial leasing by outside program providers. In some instances this is required by the municipal franchise contract. The 1984 Cable Act mandates it for the medium-sized and larger systems. Ten percent of unregulated channels in systems of 36-54 channels, 15% thereafter. Under the system, program providers can lease time at a charge based on a published rate schedule, and show whatever they like. In practice, this often means programs with a sexual orientation. Due to such programs, cable operators are required to provide to parents, on request, locking devices for some channels.

Another heavy user of leased access are religious broadcasters, who support the program through appeals for donations.

There are mainstream uses for leased access, too, but so far there is no national coordination. One day, however, a national channel such as HBO may decide to switch to leased access, and make it legitimate. The principle of leased access is a sound one, but it is in a chicken-and-egg transition phase. Lease rates are currently quite cheap. In Manhattan, they are \$25 per half hour.

B. Non-Commercial Local Media

1. Video Cassette Recordings. Many public libraries are stocking and lending video cassettes, and are affiliated with

regional exchange systems. Their role is, in particular, to provide affordable access to film classics, instructional films, and documentaries. This has been a booming development, and it has brought new types of users into libraries.

2. Public Television. This has been the traditional non-profit local medium. The organizational structure of American public TV is reminiscent in its complexity to that of the Holy Roman Empire. Public stations are partly supported by the umbrella funding organization CPB. The 300 plus stations are, however, entirely independent and usually run by local non-profit boards. In some instances, state universities own the stations. There has traditionally been much local issues involvement on public TV. The main problem for the stations is their lack of government funding, which is probably the greatest scandal of the American television system. In consequence, they have to rely more and more on corporate donations.

3. Instructional Television Fixed Services (ITFS). ITFS is a special kind of non-profit broadcasting. It operates on microwave frequencies, and has been allocated to educational institutions for use in instruction. Licenses are held mostly by local public school systems, by catholic private schools, and universities. An interesting development took place in 1984, when the FCC permitted these channels to be leased to commercial program suppliers during the evening hours at which they were usually not operating for educational purposes. This provided several educational institutions with an opportunity to raise

funds in order to finance their educational broadcasting. Columbia University went one step further and applied for almost one hundred ITFS licenses across the country, in cooperation with a private broadcaster. But this was not permitted by the FCC.

4. Low Power Television (LPTV). LPTV was discussed in the earlier section on commercial local media, due to their similarity.

5. Cable Television.

(a) Educational and Government channels. Many cable systems have such channels mandated by the franchise contracts, for use by the public school system, fire department, social service agencies, etc. Usage is low. Some municipalities show meetings of the city council, of committees, and of hearings. In Portland, Oregon, the 108 channel system provides 10 LO channels, one oriented to a black audience, another for hearing-impaired, a health channel, etc. One example of the government channels has been to interconnect old-age homes with each other and with social service agencies for regular dialogues, as is the case in Reading, Pennsylvania.

In several instances, theatre productions have been put on LO. One non-profit theatre group is the Reston Repertory Television Theater in Virginia. It spent as little as \$2,000-\$3,000 on a production. In Manhattan, Off-Off Television was on cable live, also operating with tiny budgets. Both efforts stage highly original screenplays. In neither case are

regular major theatres involved, since their labor contracts would make a cable appearance very expensive. At the new Denver Arts Center, TV facilities are built in and make production simpler and cheaper.

(b) Public Access. This is perhaps the most important local form of use of new forms of media. It is known in some other countries also as the "open channels."

Under the system prevalent in America, any individual or group can receive free time on cable television on a non-commercial basis. Time slots can be reserved. Program series can also be set up. If production facilities are used, in some localities there are studios financed by the cable operator and available for free or at symbolic rates. In other places, program production (and its cost) is the responsibility of the individual or group. A typical production studio in New York will charge, according to a price list, about \$35 per hour and up for black and white productions, and \$100 per hour for color. In some places production facilities are aggregated. In California, for example, there are some regional access centers for production.

It is important to understand that the American experience with public access has been very mixed. It has worked in some places reasonably well, while in others it is totally dormant. In metropolitan centers, there is a good deal of use of PA. Some of it is purely "vanity television," used by individuals who

crave the limelight, or who would like to invite their friends. Others are thoughtful and provocative, or off-beat and refreshing. In New York, for example, the hostess of an off-beat interview program regularly smokes marijuana on the program. She is sometimes followed by a medical call-in program "Foot Talk," with a podiatrist, possibly the world's most boring program. In the small town of Hutchinson, Minnesota, an active PA program brings dozens of local residents on the tube discussing agriculture, children, local politics. It shows local sports events, and it fulfills its function as the electronic soap-box for all kinds of speakers. In some localities, special "media access groups" of like-minded individuals have emerged.

On the whole, cable companies are reluctant about PA. On the one hand, it takes channels away from their free disposition. It also gives them bad publicity with some viewers, who are shocked at some PA programs, and blame the cable operator, who normally has no right of censorship. They do not understand that almost by definition, public access draws on fringe groups who are not served by the mainstream media. On the other hand, local access channels give cable as a medium the reputation of being "different," and this is helpful in signing up subscribers. It was also helpful in persuading cities to invite cable in the first place.

Cable companies can run LO programs to look like a public access channel, with much local community group activity. The difference is that they control the channel and its content,

whereas in public access they are essentially like a common carrier, simply transmitting information for payment.

The main failing of public access channels has been its financing. To simplify, in many cities there is no money because no regular source of funding has been established. The city usually gets a franchise fee of 5% of gross revenues from a cable operator, which adds up to a lot of money, with the original idea to use it for local programming; in reality, the money goes into general revenue and from there to fix pot-holes and other municipal priorities. In fact, when an influential Congressman proposed to earmark by law 2 of the 5% for local and national program funds, the cities were not interested. There are some cities where the cable operator's tax goes into a program production fund. In others, the cable operators must provide studios and technicians. There have been, unfortunately, misuses of the program funds, and they have discredited the idea in some places. In New York, several cable program boards were fully paid for months, despite the fact that there was no cable yet. In Boston, a supposedly independent body was set up, but in the end it turned out to be controlled by the mayor. There is also the problem of censorship through selective funding. Given the sometimes anarchic style of PA, it is hard to see how public funds would be given without pressure to reduce the worst.

Fortunately for the introduction of local communications, the trend of equipment prices has been favorable. Today, one can assemble a decent basic system for less than \$30,000, including

two cameras, editing equipment, tape machines, monitors, audio, and miscellaneous equipment.

VI. Impact of New Media on Local Performing Arts

It is important to discuss the effects of the new media on traditional forms of communications, in particular performing arts, since they are a substitute for television for many viewers. New media are seen as a threat to old cultural media. What has been the American experience? This requires some detail.

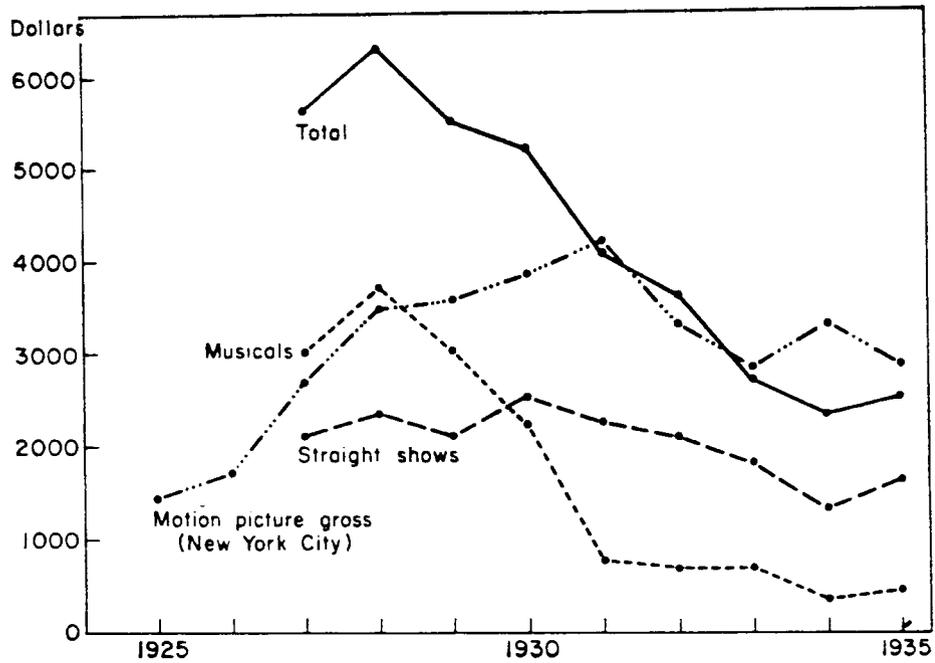
Observation #6: New media have not negatively affected local performing arts.

They have been hit much harder before. Theater in America in the late 1920s and early 1930s was affected 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 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 1 provides 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.

Graph 1



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

But Broadway shows stabilized in the 60s and 70s. 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 and summer stock companies increased from 130 in 1948 to 165 in 1962.

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.

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

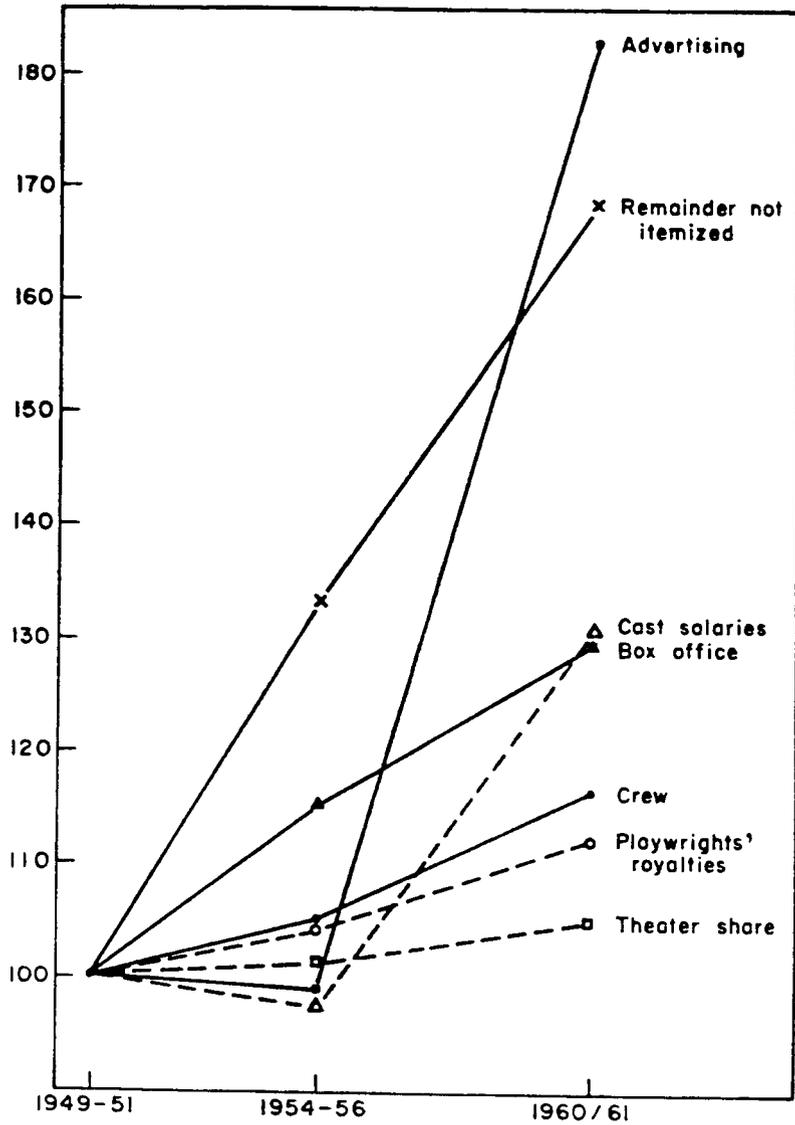
artistic institutions (Table 2), and has forced increases in admissions charges and government subsidies.

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 reportedly 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. It is therefore important for theaters and its personnel to diversify their sources of income. Can the new media provide such opportunities?

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

Table 2

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

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. 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. 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.

In all of these plans, the size of the market for television drama should not be overestimated. The attached Table 3 of prerecorded videocassette software by program type includes drama

Table 3

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	<u>100%</u>

SOURCE *Videowee!*, 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%.

Can small regional theaters and small companies play a role in the new media? The answer is a modest 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 "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). 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.

VII. Public Libraries and Education

Observation #7: The concept of public libraries is threatened by the new forms of private information distribution.

There has always been great concern about electronic media affecting children's education negatively by displacing books.

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. 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 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

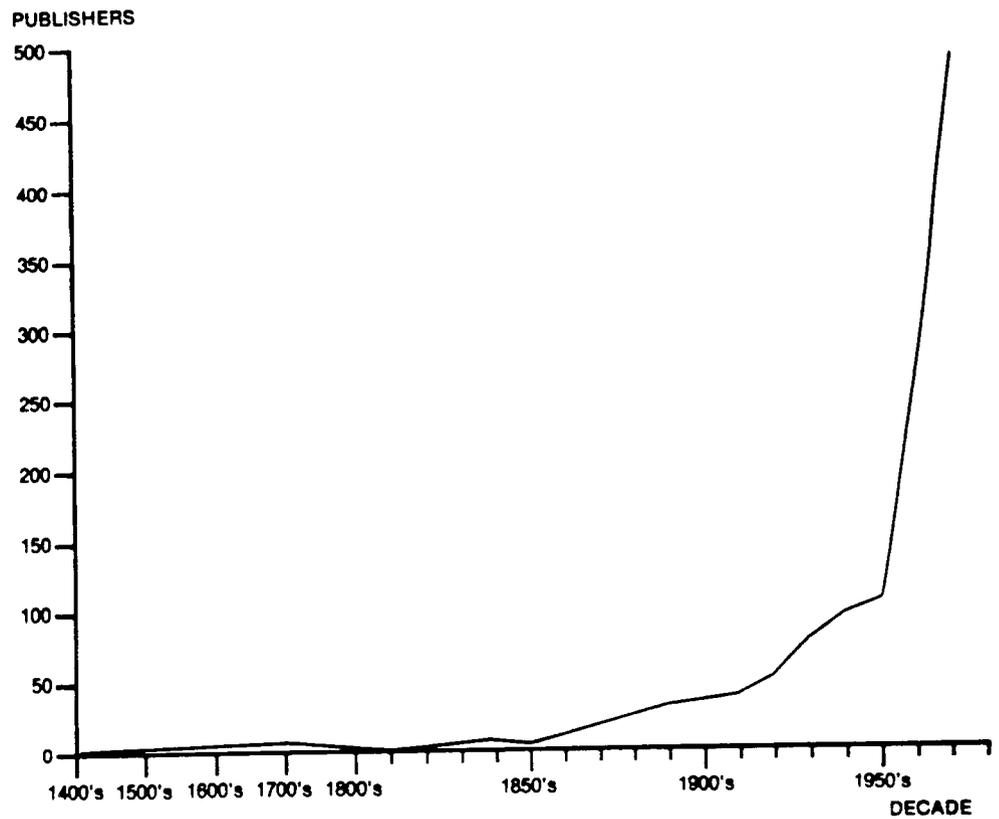
is therefore best to look at the health of book publishing. In America, the industry has been steadily growing in terms of total titles and books sold over the period of television.

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. 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.

Table 4

FOUNDING DATES OF PUBLISHERS IN 1981 LMP

<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



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

Alas, the average library acquisition price index more than doubled during 1974-1982 for American hardcover books and somewhat less than doubled for foreign books. Library budgets, however, in 1982 were only 1.7 higher than that in 1975, while acquisition costs multiplied 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. Compared with 1978/9, library 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%, but 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.

In parallel with the trend toward integration of media production, what used to be libraries are becoming information resource centers. In addition to regular books, they begin to provide video recordings, computer software, and electronic games. They are subscribed to on-line data bases and have access terminals for their use. They could also provide, for specialized materials, print-out facilities for "instant books" which are electronically ordered and transmitted.

There are implications to such a library system. Access into on-line data bases is not cheap. One cannot expect libraries to be able to support readers' use of them for more than a short period. Publishers are not going to give away the information for free. Hence, the system of free libraries may not be sustainable. Extra budgets are needed to operate the libraries, but even so, limits on on-line use need to be established.

There are some who hope that the new technology of laser-disks will solve these problems. Such a cheap storage medium would indeed reduce the cost of paper, binding, etc. However, the main expense in publishing is in the editorial process, not in the materials, and a publishers' prices to libraries must still be significantly above incremental cost for them to survive.

VIII. Implications for Local Governments

What then are the implications of new media for local governments?

Observation #8: Local electronic communications is becoming a responsibility for local governments, and requires their preparation in financial and operational terms.

As long as television was distributed nationally and broadcast by stations outside their regulatory control, local governments everywhere had little input into television. But this is changing. We have discussed the emergence of multi-channel environments that fragment the audiences. Commercial program providers, given their economic incentives, will aggregate locally narrow slices of audience into national and global audiences, and thus, while increasing program diversity, will not truly serve specific local communications needs. Low power television and local origination cable operators can add a bit to local program supply, but thus will by necessity be limited. The main role will be outside the commercial system. Here, "open" cable access and governmental cable channels offer the best promise for local communications. But the American experience shows that they cannot exist, outside the major centers, without financial support to the producers of the programs. It could be objected, of course, that local governments did not support television programs in the past, so why now? The answer is that the nature of the communications

process is changing. Visual information is increasingly its role as the number of channels and of commercial program suppliers grows. In the past, the "mix" of programs could be controlled by severe restrictions on private parties from entering "video publishing," but this policy option declines, as has been discussed. To restore an optional mix of programs, in the future, requires not subtracting programs deemed harmful by regulation, but rather of adding worthy programs where the market system does not provide them. This, like public education, is a public responsibility.

Another question is why local governments rather than national or state governments must play such role. The answer is that while higher levels of government can indeed help finance locally based program institutions, their priorities will naturally lie in national or regional programs. Given their own budget constraints, this makes perfect sense. Hence, for purely local programs local governments are ultimately responsible, directly or indirectly.

In the past, a local role in television seemed a fantasy in economic terms. Didn't it cost the ZDF one half billion marks to build its new headquarters and studios? Fortunately, the prices for equipment keep dropping while their performance increases. As mentioned, a moderately adequate black and white studio can be furnished for less than \$30,000. Of course, the quality will not be as good as those of official networks, but viewers will get used to this, as they have gotten used to paperback books with

small print and cheap paper. The primary bottleneck of program production are people. Various groups and individuals are interested in reaching a broader public, but they have no production experience, and usually fear new technologies. The role for local governments is hence to (a) provide them with reasonable production facilities, just as they now make meeting room facilities available, and (b) to help train cadres of amateur cable television production staff. In some instances, (c) direct production subsidies could make sense. Because their political use and abuse create problems, safeguards are necessary.

In an era of tight local budgets, where should these funds come from? Fortunately, the local governments, at least in the United States, have opened themselves a steady flow of income through the 5% surtax on cable revenues. Unfortunately, they divert it to other uses. Parts of this money should be earmarked to local communications--video, theater, libraries, etc.--instead of disappearing in general revenues. For advocates of local media, it should be a priority to achieve such allocation. The small video groups have demonstrated that the need for huge production budgets is a self-serving myth of established media organizations. But they clearly need some moderate support, and this defines a local responsibility to enrich the local experience, just as local theater enriches it.

Observation #9: Increasing information wealth leads to an increasing relative information poverty whose reduction requires

public subsidy.

Additional responsibilities arise, as has been discussed, for education and libraries. As society moves into the age of the information economy, the role of information as an input increases, and with it its aggregate cost. Unless one wishes to witness the emergence of an "information poor" class in society, it is necessary to subsidize the use of information resources, and the ability to handle information.