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Towards An Integrated Communications Market: Overcoming The Local Monopoly of Cable Television

NAME: Eli M. Noam *

BIO:

* Associate Professor of Business and Lecturer in Law, Columbia University. A.B. 1970, Harvard University; A.M. 1972; J.D. 1975, Ph.D. 1975. This paper was aided by the Center for Law and Economics Studies at the Columbia Law School, and by the Columbia University Graduate School of Business. Help and advice were generously extended by Stanley Besen, Michael Botein, Sidney Dean, Douglas N. Jones, Don LeDuc, Loretta Raymond, David Rice, and Lawrence White. Mark Nadel's help was particularly active and constructive. My special thanks go to Nadine Strossen.

TEXT:

[*209] INTRODUCTION

This Article proposes a new policy approach to the problem of local monopoly in cable television. The proposal, in brief, is to cease treating cable television and telephone services as two different media carefully kept apart, and instead to permit each to enter into the other's market as a competitor. The result will be one or more national telephone networks that are parallel to the Bell System, and the emergence of common carriers in cable television, two developments that enhance diversity in telecommunications and reduce the need for direct regulation of both telephone and cable.

Two important monopoly issues exist today in telecommunications. The first is the local distribution power of telephone companies in general and of the Bell System in particular, a well-recognized object of recent vigorous if controversial government action ¹ and of numerous legal and economic [*210] analyses. ² The second, less widely perceived at present though potentially more serious in its consequences, is the local monopoly of a cable television company. It is, briefly, the largely unrestricted control of a cable company over potentially many dozens of television channels in communities where it holds a franchise. The public policy analysis and the subsequent government actions to these twin problems has been active, but significantly flawed in one respect: it fails to recognize that the

two monopoly issues, seemingly dealing with different industries, are in fact related. Once one ceases to treat the industries separately, each can be used to eliminate the other's monopoly.

This conclusion is reached after a detailed analysis of the various proposals which have been made to remedy the local monopoly power of cable television. The Article discusses these alternative policies, demonstrating that either they will not work, or that their social and economic cost may be undesirably high. It then proceeds to develop a different approach to the problem.

The Problem of Cable Monopoly

The cable television industry is subject to a checkered and changing set of public policies.³ The rapid development of the technology has led to a wide recognition of the communications potential of the new medium.⁴ Less widespread is an understanding of its impact on the diversity of voices that can reach the public. Most people mistakenly believe that the large number of video channels means that the number of program [*211] sources from which television viewers can choose will necessarily increase.

This view, however, is faulty, because it overlooks the structure of cable television and the dual function which it affords to a cable franchise holder. Like a telephone company, a franchise holds a natural monopoly in the local transmission of communication signals; but unlike a telephone company, it is not a common carrier⁵ and thus not obligated to transmit the programs of other producers and distributors of programs who would like to reach the public. Instead, a cable operator has to a very extent control and discretion over the content of the video channels,⁶ an ability normally described as programming power. In the terms of monopoly analysis, a cable operator is permitted to extend his monopoly over distribution, where it is "natural," upstream (vertically) into the stage of program control, which is not monopolistic by nature.⁷ There is nothing pre-ordained about this system. One could, alternatively, easily imagine cable channels that are occupied by independent and rival cable networks which compete vigorously for viewers, just as they do in broadcasting. Yet under the present system, decisions as to whose programs are carried largely remain with the cable operator,⁸ and are generally on profit considerations. To use an analogy, it is as if one company would own the entire television spectrum in a geographic region, and could alone determine its use.

Such programming ability is a remarkable source of power over visual information. The number of channels in recently proposed cable systems for metropolitan areas is approximately 150 and more,⁹ up from the standard twelve channels of only a few years ago. Even more channels should become available in the future as cable trunk lines are added.¹⁰ Only [*212] a small number of channels are removed from the cable operator's control, by their "dedication" to a variety of specific purposes. For example, each broadcast station regularly received within the franchise area of the cable system must presently be given a channel.¹¹ Similarly, franchise agreements may require one or several channels for non-profit and free "community access," and commercial "leased access", and may set aside channels for the uses of local government. But even after subtracting all of these, a cable operator of a future 150-channel system may still be left with perhaps 100 cable channels at his disposal.

The control over channel access has, by the logic of economic profit maximization, consequences on the sources of the programs. It dictates a further vertical extension of the monopoly into the syndication and production of programs, thereby appropriating the profits of program production and syndication in addition to those of its mere transmission. This trend is well on its way at present for the larger cable systems. For example, the American Television and Communications Corporation (ATC), the nation's largest cable operator, is linked, through its parent company Time, Inc., with both the nation's largest program supplier, HBO, and the program service Cinemax.¹² Moreover, ATC has just acquired the USA Network, a sports program supplier.¹³ Teleprompter, the second largest cable system, is a half-owner of the movie service "Showtime,"¹⁴ and through its parent Westinghouse¹⁵ will soon own two news channels.¹⁶ Warner Amex, the fastest growing cable system,¹⁷ owns the "Movie Channel," another large program distributor. Each cable system can restrict the access of program services which it does not own in favor of its own program services. It can also restrict the access of independent [*213] movie producers to local pay-cable distribution.¹⁸ As this trend progresses, it augurs a future in which the average American home may receive more than 100 television channels whose programs are chosen, filled, and possibly produced¹⁹ by whichever company holds the local cable franchise.

An example of the potential for preference and exclusion inherent in vertical integration between program distributors and producers is the access policy of Teleprompter towards the innovative Cable News Network (CNN). Teleprompter recently advised all of its cable systems across the country not to enter into access agreements with CNN, since Westinghouse -- Teleprompter's then-prospective merger partner -- was starting news networks of its own.²⁰ In the future, no CNN news are likely to be available in Teleprompter's franchise areas.

A recent FCC special report²¹ denies the harmful possibilities of such vertical integration, concluding instead that a cable operator would buy the programs of the cheapest supplier, regardless of who it is. This analysis, however, is problematic in several respects. First, it does not take into account the economies of scale and scope for a program

supplier with a large and assured market, which reduces his cost of production relative to that of his non-integral competitors. More importantly, the analysis is based on an implicit assumption of a perfectly elastic, i.e., horizontal, supply curve. As soon as one allows for the more realistic upwardly sloping supply curve,²² [*214] in which a higher market price increases the supplied quantity, a "producer's surplus" exists, i.e., equilibrium is reached at a price where many program producers are able to sell their product at a price higher than the minimum which they would accept. This is also known as "economic rent." By purchasing from his own program subsidiaries, a cable operator can therefore appropriate part or all of this rent or surplus to himself.²³ Additionally, the FCC special staff's analysis implicitly equates an optimal policy with one that causes programs to be produced efficiently, even if the result may be that they are all produced by one company. Yet cost-efficiency of program production can hardly rank equal with the assurance of diversity of program sources as a goal for public policy. Such diversity is an important value in itself, unlike the diversity of origin of, say, the components of a GM car, for which the FCC analysis would better apply.²⁴

The economic logic of monopoly operation also causes the number of channels that are offered to be smaller than optimal. Because many of the viewers of one program are diverted from others, a cable operator may, beyond a point, not gain from increasing the number of available channels, while a more competitive system would still provide additional viewing options. Hence, diversity in a strictly numerical sense may also be reduced in a monopolistic market.

The consequences of such control over what will become, arguably, the primary medium of entertainment and information, are serious in a society where the unimpeded flow of diverse information is held to be a fundamental requirement.²⁵ As [*215] the Supreme Court has observed, "[T]he widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public."²⁶ The FCC holds it "beyond dispute that one party should not control the content of communications in the home."²⁷ The threat of monopolization is not reduced by promises of self-restraint by the cable operators. It is not to denigrate the operators' commitment to varied programming sources to observe that the economic incentives work in the opposite direction, and the effects on programming are inescapable under the present system.

The issues raised by a local cable monopoly have been discussed before by a number of commentators.²⁸ However, public awareness of the problem is not widespread. At most, there is concern with the potential of a local monopoly to charge viewers a high subscription fee.²⁹ Yet, this is not likely to become a major problem, and even if it does, abuses can be constrained fairly easily. Instead, the major problem with cable television lies in each operator's potential control over the majority of programs that the population of an entire city or region can watch. This threat to the diversity of programs and to the sources that can reach the public is still incipient, and thus does not attract public attention. Most cable companies still have a limited channel capacity,³⁰ which tends to obscure the reach of their programming power. Even where the number of channels is large, cable companies tend to concentrate their present resources on the winning of new franchises and the construction of cable lines, with a lesser, though growing involvement in active programming and program production, [*216] especially in pay-TV. They must also maintain a responsible image, lest their chances for additional franchises be injured elsewhere. None of these factors, however, will be long lived. In the future, when all franchises have been awarded, all wiring strung out, and all systems upgraded to a large-channel capacity, the impact of this monopoly structure will become apparent through its economically inevitable consequences.

Because of the difficulties in changing the new medium once its structure becomes entrenched, it is essential to formulate public policy now, with the goal of assuring the diversity of program sources and program types.³¹ In 1972, the Sloan Commission on Cable Communications concluded, "Cable television today is at a stage where the general exercise of choice is still possible. . . . It is not as yet so fixed a part of the national scene, as for example conventional television is, that it appears almost quixotic to attempt to redirect its energies. There is, in short, still time."³² Since then, ten years have passed. The cable industry has become a major medium of mass communications, located in nearly every electoral district of the country, and, by the nature of the franchising process,³³ politically well connected. Changes have thus become much harder to effect.

The following sections will discuss several of the policies that have been proposed as a way of dealing with the cable television monopoly issue, and the problems which they raise.

I. MODELS OF CABLE STRUCTURE

A. *Common Carrier Status*

Perhaps the most clear-cut way to respond to the local monopoly in cable programming would be to separate a cable company's distribution role from its programming function. Under such a "separations policy" structure, cable system operators would act solely as conduits for the programs of others [*217] without control over the nature or content of programs. For a fee they would have to offer non-discriminatory "access" to all comers. The function of cable operators would become then, similar to that of telegraph or telephone systems -- i.e., that of a common carrier.

Such separations policy ³⁴ has been advocated by groups as diverse as the American Civil Liberties Union ³⁵ and the administration of President Nixon. The 1974 Report of the White House Office of Telecommunications ³⁶ (the Whitehead Report) led to a 1974 draft bill, proposed by the Nixon Administration, which would have required that for each channel controlled by a cable operator, one channel must be set aside for leasing to independent program suppliers. One year later, this proposed requirement was reduced to one channel of leased access for every three that were operator-controlled. Neither of the bills passed.

At present, cable television is not treated as a common [*218] carrier. ³⁷ In 1970, the FCC briefly toyed with, but again rejected, the common carrier concept when it requested comment on a proposal that the larger cable systems provide at least fifty percent of their channels for a variety of uses "at reasonable and nondiscriminating rates. ³⁸ In its 1972 rules ³⁹ the FCC rejected a separations policy, a decision upheld as a "rational choice" by the 9th Circuit against a challenge by the ACLU. ⁴⁰ In 1976, the FCC instituted rules for a mandatory leased access on at least one channel, ⁴¹ but they were struck down, the Eighth Circuit noting that "the attempt to bludgeon cable systems into become common carriers is an exercise specifically forbidden the Commission within its delegated powers. ⁴²

A common carrier status for cable, advocated by many access-oriented public interest groups as well as by independent program suppliers, ⁴³ and intellectually neat a solution as it may appear, would create new problems. Foremost among them would be the necessity for a regulation of the rates that are charged to program suppliers for access to a channel. ⁴⁴ This regulation of access rates should be distinguished from that of [*219] subscriber charges, although the two rates are somewhat related, because the higher the charges to consumers, the lower access rates may become. As an unregulated common carrier facing a large demand for channel time, an unconstrained cable operator could act as a classic monopolist, *i.e.*, able and willing to restrict the supply of channels between customers. Many advocates of a common carrier status overlook the need for rate regulation. ⁴⁵ Yet, one must realize that the abolition of a vertical extension of monopoly deals only with a *symptom* of power, and does not *eliminate* the power itself; the latter will, if otherwise unconstrained, find expression in other monopolistic behavior, ⁴⁶ such as higher prices or smaller offerings of channels, or price discrimination. The situation as a whole is that of a classic monopoly, like those which led, in the nineteenth century, to the regulation of the rates of utilities and rail transportation.

The emergence of rate regulation would cause no cheer. ⁴⁷ Historically, rate regulation is easiest to administer where the product can be clearly defined and quantified and where the industry is relatively stable; the provision of water or electricity are good examples. Rate regulation is much more difficult when it deals with complex and variable mixtures of services ⁴⁸ or where the regulated industry is extremely dynamic in its development as is the case with cable television. ⁴⁹ Institutionally, rate regulation encourages predictability, and its reconciliation with risk-taking in technological development and innovation may not be easy to achieve. Administratively, rate regulation is patterned on considerations of rate base, rate of return, and allowable expenses, a highly complex accounting scheme not [*220] to be lightly extended into another sector of the economy. ⁵⁰ Where advanced technology is involved, it is difficult for a regulating agency to evaluate the reasonableness of many expenses. As a consequence the regulation of profits is emphasized, leaving a company relatively free from constraints on capital and operating costs, which it can largely pass on to users when demand is inelastic.

If a cable operator had common carrier status, its vertical transactions with an affiliated program producer or syndicator would also have to be regulated. The regulation of the Bell System, for example, has included in the past governmental controls of the relation of its operating companies with Western Electric. ⁵¹ Underlying these rules is the concern that the common carrier's preferential treatment of the high priced but related company enables the latter to compete unfairly, and permits the shifting of profits from the regulated to the unregulated part of its business. Such preferences could also be granted, directly or indirectly, in the allocation of cable access. Hence, cable operators would have to remain independent from the large number of firms and individuals with an interest in the production and distribution of programs. ⁵² Alternatively, the terms of the vertical transactions must be carefully regulated. Again, the results would be an extensive set of rules, involving thousands of cable systems.

At the same time, rate regulation gives governments the potential to influence programming content. With a century of regulation as a guide, one can confidently expect that rate setting will inevitably be used by regulators in an attempt to promote some types of programs over others. For example, in order to encourage the showing of programs that are socially desirable from the regulator's perspective, lower rates for their access may be instituted. Cross-subsidies are common in other areas of regulation, and it would be surprising if they would not also evolve quickly in the rate regulation of cable. The [*221] special concern with their existence in cable television is that they involve the subsidization of certain contents of speech, in preference to others, by governmental action; it is a public policy of questionable wisdom and practicality, given the multitude of worthy causes that will emerge with some legitimate claim.

Common carrier status for cable would engender other problems as well. For example, it is possible that under a first-come, non-discriminatory system of access one or several national cable networks could gain substantial market power, at least where the number of channels is small, by simply presenting themselves early. ⁵³ This, by itself,

would not necessarily be a negative development, but it is conceivable that powerful cable networks would prevent the subsequent expansion of cable's channel capacity in order to create barriers to the entry of rival cable networks. ⁵⁴ An example of the potential for preemption was the 1976 attempt by the Optical Systems Corporation, a pay-TV operator, to forcibly open cable to its business. The company sent letters to over 500 cable systems in which it cited the then-effective FCC rules concerning leased access, and in effect demanded access to all of these systems.

Another argument against a separations policy, voiced primarily by cable companies, is that it takes a great deal of capital investment to construct a cable system, and that the extra profits generated by the programming activity of the operator help to defray the cost of construction and improvement. Therefore, without these profits marginal areas would not be wired for cable reception and some entrepreneurial risks would not be undertaken. ⁵⁵ In addition, venture capital may not be [*222] attracted when the investment is not coupled with control over the programming. Presumably, some programs may have negative effects on the attractiveness of the distribution system itself, and control over their access should therefore be among the economic prerogatives of investors.

Cable companies are extremely concerned about the prospect of common carrier classification which may deny them the desired status of "video publishers". Thus they have consciously refrained from offering some services which may invite the dreaded common carrier status. ⁵⁶ In one instance a New York City cable company successfully offered banks cable transmission of data, ⁵⁷ but modified its service when the New York State Public Service Commission started to consider whether this was a common carrier service subject to tariff. ⁵⁸

Even if all of these problems are disregarded, there remains the question of how effectively the goal of diversity would be promoted under a common carrier system. ⁵⁹ This question has no obvious answer. In all probability, a greater diversity of programming *sources* could be expected. However, this does not necessarily mean that a common carrier form of cable would lead to a larger diversity of program *types* [*223] than under a vertically integrated monopolistic arrangement. Where there is only one monopolistic programmer, program selections would be made to maximize total audience (or, in the case of pay-TV programs, to maximize revenue received from audiences). ⁶⁰ Under such a system, as some economists have argued in the different context of broadcasting, relatively narrow segments of the potential viewing population may receive programs designed to interest them, in contrast with competitive television. For example, if there are already three situation comedy channels operating, it may be rational to provide a channel for, say, stamp collectors instead of offering a fourth comedy. The latter would not add many new viewers to the total television audience, and instead would only divert viewers from the existing comedies. But with competition for that audience among rival program suppliers, the fourth comedy would in all likelihood be shown, by the same economic logic that leads to the present common-denominator programming of the television networks. ⁶¹ For this reason, some economists feel that a monopolistic structure in programming enhances program diversity; by implication, a cable programming monopoly actually be desirable. ⁶² Other analysts disagree, arguing that the opposite result is just as likely, primarily because a monopolist need not satisfy a viewer's first choice in program types if that viewer would also water lower choice program types. ⁶³ With competing programmers, however, minority preferences would be addressed more often, since no competitor would consider diversion of viewers from other programs a cost to him.

[*224] In summary, a common carrier policy would be effective in separating program distribution from program selection. It would also increase the diversity of program sources and usually that of program types. However, it would also necessitate fairly complex rate regulation, and could lead to governmental involvement in program selection. ⁶⁴

Public Ownership

A second way to deal with the local monopoly of cable operators would be to substitute public for private ownership. Under such a policy, the physical cable system would be owned by a local or state authority. ⁶⁵ The necessary investment capital can be raised by revenue bonds backed by the credit of a local government. Actual technical operation may be subcontracted to private operators, including cable companies. Public ownership, it should be noted, does not by itself assure common carrier access to program suppliers, since the local authority may still act as a selector of programs. While this selection could be subcontracted to a private company under some policy guidelines imposed by the municipality, a more likely course would be to vest programming decisions in an independent board of public representatives. However, because of the reluctance to give a governmental body -- however independently it may be -- powers over program selection, proposals for public ownership are often coupled with a common carrier proposal. Public ownership exists at present for thirty-six cable systems, but only two of these -- in San Bruno, California, and Frankfort, Kentucky -- have more than 5,000 subscribers. ⁶⁶ Recently St. Paul, Minnesota adopted the concept [*225] of public ownership in principle. ⁶⁷ Several other cities, including Chicago, Washington, Cambridge, and Philadelphia, are considering the public ownership option with varying degrees of seriousness. ⁶⁸

Among the attractions of public ownership, aside from local control and the potential diversity of programming sources, is its potential as a revenue source. There is a widespread perception, fueled by private companies' efforts

to obtain franchises, that a cable operation can be extremely profitable.⁶⁹ But under current law, local governments are precluded from imposing franchise fees at a rate above 5 percent of revenue.⁷⁰ Hence, public ownership can be a way to increase revenues from the riches of cable TV,⁷¹ either by a direct city operation or by its lease to a private operator.

The most obvious problem with public ownership is government's traditional inefficiency in operating a business operation. Cable television is a complex and rapidly changing technology. It is not easy to develop, run, or adapt. New developments occur practically daily. As an industry, it seems to be far better suited for the special skills of private managers, rather than those of local civil servants. Of course, when the technology has matured, operation by a public entity may be more practical, but that day is far off.

A second problem with public ownership is the potential politicization of programming and access allocation. Political struggles may accompany every controversial program, and programming decisions by a city authority may create First Amendment problems.⁷²

There are also some technical obstacles to public ownership of cable. Among them is the requirement in a number of [*226] states for municipally-owned public utilities to charge a rate only as high as is necessary to cover operating expenses.⁷³ Other states prohibit cities from granting exclusive leases of their property to private persons, as would be the case if a city leased cable facilities to a private operator.⁷⁴ There are also legal restrictions on some towns' ability to issue bonds for the construction of a cable system.⁷⁵

The main argument in favor of a publicly owned cable system is that it could assure a diversity of access. But this goal may also be achieved by different policies, without the problems associated with governmental responsibility for programming and operational control over a complex technological system.

Programming Regulation

In contrast with a separations policy and public ownership, which are both *structural* approaches to the cable monopoly problem,⁷⁶ an alternative policy would be the regulation of programming *conduct*.⁷⁷ Under such an approach the diversity of programming sources would be maintained by government regulations, in the form of general rules and/or specific conditions in franchise agreements.⁷⁸ To the extent that a governmental policy on diversity can be detected at all today, this is the direction taken.

For an evaluation of programming regulations, the practical problems of governmental interference in program choice must be considered. It is relatively easy to mandate the carrying of already existing broadcast stations. But when it comes to the allocation of the remaining channels among the multitude [*227] of potential program suppliers, governmental guidelines may be either oppressive in their interference or meaningless in their generality.⁷⁹ Perhaps the most logical way to proceed would be to institute rules restricting the percentage or the number of channels that may be filled with the programs of companies affiliated with the cable operator. While such a system would open the remaining channels to outside suppliers, their selection would raise the same questions previously considered.⁸⁰ Either the cable operator could exercise monopoly power in the grant of and charging for access, or rate regulation would become necessary. An alternative form of regulation would be to mandate a certain program mix, for example by requiring foreign language channels for minorities. Yet this would place a governmental body squarely in a programming role and, furthermore, would leave unsolved the problem of diversification of program *sources*.

One existing diversity regulation is the FCC requirement, often also incorporated into franchise agreements, that cable operators carry all existing over-the-air television stations in the area of cable operation.⁸¹ The purpose of this provision has been to protect broadcasters who were fearful of being excluded from distribution by cable, by providing them with assured and free access to every cable subscriber in their broadcast area.⁸² However, the future of this access should not be taken for granted. In the early days of cable all that operators could offer was the regular television stations. However, with the growing availability of programs for which subscribers will pay, the broadcasters' free ride will become a burden to cable companies. Particularly in the case of many UHF stations which have been elevated from obscurity to an equal spot on the cable dial, the free access is at the expense of cable companies. The latter's profits are reduced because they cannot fill the channels with profit-making programs and because their potential viewers are diverted. Hence, cable operators challenge [*228] this "must-carry" rule and other program provisions as violations of cable companies' First Amendment rights.⁸³

The FCC, as part of its recent deregulatory attitude is also taking a hard look at the "must-carry" rule. In a recent speech to a cable association, Commissioner Ann Jones predicted the elimination of the requirement within a year.⁸⁴

Another present diversity regulation is the frequent local or state requirement to provide channels for the public access of any not-for-profit user and for commercial "leased access".⁸⁵ Such access rules were also required under the FCC rules until they were struck down in *FCC v. Midwest Video Corp. (Midwest Video II)*⁸⁶ as being beyond the agency's mandate. The idea behind public access is to exploit the local distribution characteristics of cable by making

it an outlet for local creativity and opinion, a form of an "electronic soap box". But while some innovative alternative programming is generated by these public access channels, their present, not-for-profit format, coupled with a lack of governmental financial support, does not permit sustained high quality programs that draw significant audiences. ⁸⁷ Thus, when the profitability of channel-use by the cable operator increases, the number of public access channels may be curtailed.

Neither has leased access been successful. The use of such access has not been granted liberally by cable operators, since the programs may be in direct competition with the operators'. In addition, operators are concerned with liability for pornographic or libelous content over which they have no control, ⁸⁸ [*229] as well as with the negative effect of inferior programs on their reputation. As reported in the trade press, they are also concerned with antitrust problems if they cannot grant access to all comers:

[If] a cable operator denies a potential leasee [sic] access to its system, the operator could be sued on antitrust grounds, leading to the possibility that cable could be labelled as a common carrier. As a result, many attorneys caution their cable clients to proceed carefully when leasing channels. ⁸⁹

Discouragement of leased access may take place, for example, by lack of promotion, unavailability of posted rates, and the setting of large minimum blocks of time that must be leased.

The cable industry is also challenging the legality of local franchise requirements for leased and public access both as an impermissible restriction of cable operators' rights of free speech in order to enhance those of another, ⁹⁰ and as a requirement that they waive constitutional rights in order to obtain a public benefit. ⁹¹

Another form of diversity regulation is negative in nature, *i.e.*, it prohibits certain uses of channels. Foremost among those have been the restrictions on the importation of distant signals and on pay-cable. ⁹² These, instituted to protect local broadcasters and movie theaters who opposed sharing their audience with "imported" stations and pay programs, were recently abolished by a deregulation-minded FCC. ⁹³

A potential technique of diversity regulation is the general threat of non-renewal or loss of franchise unless certain expectations as to the programming conduct are met. This resembles the FCC's implicit threats not to renew broadcasting licenses, thereby inducing broadcasters to include or exclude certain types of programs. Given the realities of local politics, however, such a weapon is a two-edge sword. It is in the public [*230] interest to have communications media that need not quake before government officials. If frequent non-renewals of franchises were to occur, the result may be self-censorship and extreme caution in programming, thus perpetuating the present climate of franchise battles in which cable companies have to cater to local politicians, and where political and financial deals are often alleged to take place. ⁹⁴

One issue that must be considered in the regulation of cable television is which level of government ought to have the regulatory authority. ⁹⁵ The federal authority, exercised by the FCC, is derived from its regulatory function over broadcasting and has been upheld in a number of judicial decisions. ⁹⁶ However, the last few years have seen an increasing federal disengagement from cable regulation, as evidenced by the FCC's abolition of regulations on distant signal importation, program exclusivity, and pay-cable. ⁹⁷ The major remaining federal program regulation is obliged to do so, ⁹⁸ typically if the event itself has not been sold out. Federal disengagement from program regulation is consistent with the general present attitude of the FCC. Clearly, detailed controls over thousands of cable systems would also be a major administrative burden for which a centralized federal agency may not be well equipped. While a federal policy agency usually means a nationwide uniformity, the need or desirability for such uniformity is not obvious.

Because cable is franchised largely on a local basis, local governments have become a logical locus of regulation, both by setting conditions in their franchise contracts and by the [*231] continued supervision of the contract's fulfillment. Yet local governments are usually woefully equipped for the task. ⁹⁹ Even a city of the size of New York affords a regulatory body, the Office of Telecommunications, with a professional staff of only one person. ¹⁰⁰ Quite clearly, effective regulatory supervision in the complex area of cable television exhibits efficiency of scale, and the small size of most localities makes an informed and rational local regulatory process frequently unattainable.

Overall, while some regulatory role may remain with both federal and local levels of government, the state level of government may be the best locus of cable regulation as a compromise between the proximity of local government and the expertise of a federal agency. However, while some states have instituted cable commissions, mostly to provide local government with expertise, at present the role of states is quite limited. ¹⁰¹ In some instances, state utility commissions have been vested with regulatory authority over cable in addition to their other duties. Given the traditional emphasis on utility-type regulation by such commissions, that approach may then also be used for cable television, though there are serious drawbacks to this method of dealing with a dynamic and complex industry, as has been discussed. ¹⁰²

Even if an effective regulatory policy to insure diversity could be established, and the level of government that could best enforce it be determined, one would still be left with the question of its constitutionality under the First Amendment. The FCC's authority over cable has always been only grudgingly acknowledged, ¹⁰³ since the 1934 Communications Act is silent on cable and since cable distribution involves no use of the public airwaves. But even if a clear mandate were given to [*232] the agency, First Amendment protections may bar content and access ¹⁰⁴ regulations. ¹⁰⁵ In *FCC v. Midwest Video Corp. (Midwest Video II)*, ¹⁰⁶ which struck down the FCC's mandatory access rules as overstepping the agency's statutory mandate, the court did not have to reach First Amendment issues since it held invalid the "ancillary to broadcast" basis to cable access regulation. But the opinion referred to the merit of First Amendment arguments in a footnote, as "not frivolous". ¹⁰⁷ The lower court had concluded that "nothing in this case . . . indicate[s] a constitutional distinction between cable systems and newspapers in the context of the government's power to compel public access." ¹⁰⁸

State or local laws that affect program content are also challenged. In Utah, a state law making it a crime to distribute by cable "indecent material" was attacked by Home Box Office, the pay-cable industry leader. The challenge, part of an attempt to establish full First Amendment protection for cable operators as "electronic editors" or "video publishers," ¹⁰⁹ resulted in the law being struck down. ¹¹⁰

In conclusion, regulatory actions to insure diversity in programming have not been particularly successful in their outcome and have raised the problem of governmental interference with mass communications. As Judge Bazelon, who has been reviewing the FCC's policies for more than three decades on the D.C. Circuit Court of Appeals recently observed for television in general, "[government efforts to] improve the quality [*233] of diversity through content controls have failed miserably. In short, forced to choose between an unfettered right to speak and a meaningful right to know, we have achieved neither." ¹¹¹

D. *Intermedia Competition*

An appealing alternative to a programming monopoly on the part of cable operators is to rely on cable's competition with other media. Because cable television is only one of several forms of telecommunications, cable operators' programming power may be limited by their need to cater to viewers' preferences to avoid losing them to another video service. If indeed such competition exists, a cable company would have to supply the most attractive programs, from whatever sources, in order to secure viewers as subscribers, pay-channel watchers, and advertising audience. ¹¹²

Cable's competitors include conventional over-the-air broadcasters, as well as newer forms of communications such as direct broadcasting satellites (DBS) and multipoint distribution system (MDS). ¹¹³ MDS is a microwave technology presently used primarily to provide television programs to hotel guests and closed circuit audiences, but it is available for direct-to-home service. ¹¹⁴ Other potential competitors, somewhat more removed than these "live" media, are recordings such as videocassettes and video discs; still further removed are movie theaters and other forms of entertainment.

On its face, the intermedia competitive argument seems powerful. However, a closer look at each of these ostensible competitors reveals that cable's significant technological and economic advantages will probably make it the dominant medium of the future, barring unforeseen technological or regulatory developments.

Direct broadcast satellite (DBS), presently in the planning [*234] stage but close to realization, ¹¹⁵ has in particular been touted as the major form of the future because it offers new viewing opportunities without requiring the expense of laying cable. ¹¹⁶ Moreover, DBS has a science fiction-like allure, particularly in comparison to the down-to-earth technology of cable television. However, the development of DBS will be hampered by inherent economic and technical constraints.

In its pure form, DBS permits subscribers to tune into programs that are beamed from stationary satellites. ¹¹⁷ To do so, DBS requires an antenna which is not inexpensive and which may not permit the easy reception of more than a few satellites. There are also limitations on the number of satellite broadcast channels because of the usual scarcity of broadcast spectrum ¹¹⁸ which is aggravated by the wide reach of the signals, and by the sky's overcrowding with satellites. ¹¹⁹ The presently anticipated number of DBS channels (or "transponders"), according to a recent FCC staff study, is in the order of four to ten, ¹²⁰ depending on which of certain assumptions are made. Even if that estimate is conservative, the potential number of DBS channels is relatively small in comparison to that of cable.

Another relatively new medium which has been heralded as a potential competitor to cable is multipoint distribution systems (MDS). ¹²¹ MDS is similar to traditional television broadcasting, except that it uses microwave frequencies. Its main use [*235] has been for pay television, and it is in this area that it is believed to create a viable alternative to cable. Yet, given MDS's limitations, this is highly unlikely. It requires special microwave receiving equipment and also, for pay-TV, an unscrambler. It is currently restricted by the scarcity of spectrum to a maximum of two channels, ¹²² and it is questionable whether even two channels could coexist without mutual interference. ¹²³ No

television market now has more than one MDS channel. ¹²⁴ As with DBS, it seems unlikely that a large number of customers would go to the trouble and expense of installing microwave reception equipment to obtain a relatively small number of additional broadcast channels when cable can do so much more.

Traditional television broadcasting is probably a more formidable competitor of cable than either DBS or MDS, because it is well-established organizationally, economically, and politically, has access to almost every American home, and is free of charge. ¹²⁵ But it, too, suffers from the scarcity of spectrum that, in connection with the FCC's policy favoring localism in broadcasting, limits most cities to a mere handful of VHF and UHF stations. ¹²⁶ Also, in many areas of the country the reception of broadcast signals is generally poor in quality. After all, it was precisely in order to alleviate these limitations of traditional broadcasting that cable television and distant signal importation were developed. ¹²⁷

Even more important, however, are other aspects of cable technology which should establish its dominance over other video forms. In addition to cable's large number of channels, its other inherent advantages include its two-way capability, its ability to charge viewing fees, and its potential to "narrowcast".

Two-way capability means that a viewer has the ability to return signals "upstream" to the cable system, either automatically [*236] or from some form of terminal attachment. Much of the use of this technology, of which Warner Amex's Qube application is the best known, ¹²⁸ is at present experimental or introductory. Within a fairly short time, however, two-way cable should become a mainstay of home communications. On the program distribution level, a two-way system makes per-program billing for television viewing easily feasible, in the same way as telephone companies charge for toll calls. In its commercial potential, two-way communications is a marketer's dream come true, since consumers can respond to advertising messages instantaneously by pushing buttons to make an order and to transfer funds in payment. Additionally, consumers will be able to request visual information on merchandise, order, and pay, all while sitting at home in front of their television sets. Cable's two-way capability also makes possible services which should be as useful to consumers as they are profitable to business enterprises: alarm systems, meter reading, electronic banking, video text information, classified ads, and many more. ¹²⁹ Consumers will therefore benefit from two-way cable as a communications medium quite apart from its entertainment content, and commercial users would subsidize such access to consumers by their payments to the cable operator. Hence, it is to the economic advantage of the cable operator to connect as many households to a cable system as possible, and at a fairly low basic charge or even without charge, ¹³⁰ just as over-the-air broadcasting is free in order to induce its consumption as a vehicle of advertising services.

The cost advantages of "free" broadcasting over cable may therefore largely disappear, and nearly every household will have a cable television connection. With cable reaching most households, conventional broadcasting would be reduced [*237] to a supplementary role, simply providing a handful of channels independent of the cable operator, carried on cable or off it, and reaching rural areas where the laying of cable is uneconomical. Once connected to cable, a viewer would not have a great incentive to invest in a special DBS or MDS antenna in order to receive a few additional programs.

A second advantage which cable affords over traditional television is that it permits the operator to impose a charge for the viewing of specific programs. The possibility of such per-program pay-cable revolutionizes the program offering on cable because it permits programs and services with much higher production budgets. In regular broadcasting, the program's cost does not usually exceed its value as a vehicle to advertisers. This value, even when increased by the revenues from subsequent reruns and syndications, is usually far below its value to viewers. ¹³¹ In economic terminology, viewers benefit from a significant consumers' surplus, *i.e.*, they get a program for free (or, more accurately, for the value of their time in which they subject themselves to advertising messages) where they would have been willing to pay something. The sums which people are willing to pay for programs is astonishing. In Columbus, Ohio, where the two-way cable system makes sophisticated billing possible, pay-cable "junkies" are reported to pay more than \$ 150 a month for their viewing. ¹³²

The other side of the coin of free television is that certain types of programs are unavailable because advertising does not generate sufficient revenue to have them produced or aired. This is the reason why big-budget movies are not shown on television until some time after their release. Similarly, important boxing matches have to be shown on free television only after several days or weeks delay since the technology of live closed-circuit television has made special screening to paying audiences available. ¹³³ With cable and subscription television, however, such programs have become available on pay-television to a nation-wide audience. Indeed, one can expect the [*238] most desirable programs, *i.e.*, those whose consumer surplus is highest, to be largely siphoned from free television and moved to pay-television. ¹³⁴ The jewels of broadcasting, such as the Olympic Games, the World Series, and the Academy Awards Ceremonies may cease to be shown for free; this development could widen the gap between the quality of broadcast programs and of cable programs. ¹³⁵

Although pay-television is not strictly confined to cable, as a result of cable's technical advantages other media's versions of pay-television are unlikely to be viable competitors. Over-the-air broadcasting has developed "Subscription Television" (STV), permitting the transmission of scrambled signals, which subscribers unscramble with

a rented device. Because STV requires a regular broadcast channel, it is faced with the usual problem of VHF spectrum scarcity, or relegation to the less desirable UHF band. Since a new STV station would mean a reduction in the number of "free" stations, STV encountered vociferous opposition when it was first proposed, resulting in FCC rules restricting STV. ¹³⁶ However, this early fear of STV envisioned a more vigorous medium. ¹³⁷ Today, twenty years after the commencement of a large-scale STV experiment in Hartford, there are only twenty-six STV stations on the air, all of them on the UHF band, ¹³⁸ and their long-run survival in the face of cable is uncertain. At the same time, pay-cable is booming, with millions of subscribers ¹³⁹ and by now dozens of national pay-television services. ¹⁴⁰ In all likelihood, STV's significance is transitional rather than permanent. It can serve as [*239] an outlet for pay-television programs where cable has not been franchised or laid.

Alternative forms of pay-television involve the use of DBS' satellite technology or MDS' microwave transmission, and require subscribers to rent a special receiver and/or unscrambler. But should basic cable service be available free of charge, cable would enter nearly every home, and the viewing of its pay channel would flow naturally from their immediate availability, thus giving cable a great competitive edge over these alternatives. STV, DBS, and MDS would have to persuade consumers that the many cable channels ought to be supplemented, for a fee, by the few additional programs it could supply. The alternative forms of pay-television are further handicapped in competing with cable because they lack the two-way technology which enables cable operating to impose a practical per-program billing. This type of pricing which is much more sophisticated than the monthly per-channel flat charge for STV, DBS and MDS, permits cable operators to offer a more varied program. ¹⁴¹

Another advantage of cable is its ability to segment the viewer market by "narrow-casting". A conventional commercial broadcaster, controlling only one channel, tries to maximize his audience and therefore aims at the mass of viewership by a "common denominator" programming. Even when several television stations exist, they are likely to compete for this broad center of viewers. In contrast, where one operator controls several program channels, he is likely to prefer a differentiated program mix as more profitable. For instance, instead of showing several simultaneous football games, a common occurrence in competitive broadcasting today, a cable operator could show, at a given hour, one football game, one documentary and one adventure movie, thereby usually increasing total viewing audience, pay-cable revenue, and probably viewer satisfaction. He is also able -- with per-view charging -- to command different prices for different programs according to the price sensitivity of alternative viewer groups. A cable operator [*240] would be motivated to satisfy the tastes of groups with special viewing interests even if those groups were small in size, so long as their willingness to pay were sufficiently large. ¹⁴² Pay cable thus permits an escape -- within a profit-maximizing incentive system -- from the body-count orientation of conventional broadcasting, whose product is not programs but consumer audiences for advertisers.

In summary, cable's unique technical features -- its facilitation of narrow-casting, per-program charging, and price differentiation among different audiences, coupled with the fairly large number of channels and their close association with supplementary communications services -- provide it with a solid economic foundation unmatched by any of the broadcast media. ¹⁴³ Cable television is thus superior to broadcasting -- in its conventional, satellite and microwave varieties -- in terms of technology, commercial potential and viewer satisfaction, without being unreasonably expensive to install and provide. Broadcasting may still be left with a major role in areas with a low population density; it can also provide supplementary programming elsewhere, thereby restraining cable's pricing power to some extent. ¹⁴⁴ But it is hard to see how commercial television broadcasting could remain the dominant medium that it is today.

Similarly, the potential competition with cable television that is afforded by recording technologies such as video discs and cassettes is also not very significant. The ready availability of movie cassettes, which have existed for many years, has not noticeably reduced television viewing. Even if video discs, the new technology, become significantly cheaper, they do not [*241] seem likely to match the daily variety, per consumer dollar spent, of pay-cable. Video-cassettes, recorded off a viewer's television set, may actually increase cable viewing, since the latter's high quality picture and its special pay-cable programs would be more attractive than broadcast programs to those assembling personal video libraries. At some point, of course, such a well-stocked personal collection may reduce live cable television viewing, though an analogy to the book-buying habits of those with large book collections suggests that this is unlikely to happen.

II. OPENING CABLE TO COMPETITION BY TELEPHONE COMPANIES

The preceding sections have demonstrated the limitations of various approaches to counteracting the disadvantages of a local monopoly in cable television sources: common carrier status, public ownership, conduct regulation, and intermedia competitive forces.

What public policy alternatives then remain to check this emerging monopoly power? This Article advocates the introduction of competition into the cable transmission medium itself -- as distinguished from competition among different video media -- by ending its sheltered existence apart from the other wire system which also reaches into almost every home: the telephone. The proposal, in brief, is to permit each telephone company to provide cable service as a *common carrier* in the area of its telephone service, *provided* that a well-established cable company is

already operating in that area. In return, all cable companies would be encouraged to provide telephone service over their wires, and to interconnect with the new long distance microwave carriers, thus creating an additional nationwide telephone network.

At the outset, this proposal must be distinguished from three other related but fundamentally different concepts. ¹⁴⁵ The first is allowing *other cable companies* to construct one or more additional cable systems on the territory of an existing franchise holder. This proposal has recently been incorporated [*242] into a governor's bill in New York State, following a recommendation by Alfred Kahn and Irving Stelzer. ¹⁴⁶ However, the entry of rival cable systems is inhibited by several significant factors, including the necessary capital investment, an existing franchisor's ease in blocking would-be entrants by lowering its rates, economies of scale, ¹⁴⁷ and local preferences against multiple wires crisscrossing a town. ¹⁴⁸ This is not to deny that in some limited areas a competing cable operator could become established. For example, new developments in suburban areas could be wired by new entrants; some large apartment buildings could be connected to alternative cable service; and border areas between different franchise holders could be contested. Beyond such cream-skimming instances, however, additional cable operators are not very likely to emerge. ¹⁴⁹ Indeed, they have not entered in the past, though cable franchises are usually not formally exclusive. Theoretically, a rival company could apply for a second franchise where a cable company already operates. The fact that this does not usually happen ¹⁵⁰ indicates that competition from this quarter cannot usually be expected.

The second related but distinguishable policy would permit telephone companies to construct cable systems, provided they have no role in operating such systems but rather lease them to someone else for operation. This approach is presently allowed by FCC rules. ¹⁵¹ However, it not only perpetuates the [*243] negative aspect of a cable programming monopoly (by the lessee), but also augments the powers of telephone companies, without clearly identifiable benefits. Furthermore, that approach is based on a separate set of cable lines, apart from the telephone wires, rather than on an integrated "broadband" communication service such as that proposed by this Article.

The third related approach is that of permitting a telephone company to enter the cable business as an *initial* competitor for a cable franchise, rather than permitting such entry only after an independent cable company is already established. Currently local telephone companies are precluded from providing cable television service in the area of their telephone service, ¹⁵² with the possible exceptions for those rural areas which no cable company serves. ¹⁵³ The reason for this prohibition is that in a contest to win a cable franchise, a telephone company would have strong economic advantages. It already runs a wire into most homes, has utility poles and underground ducts in place, and possesses competent and experienced technical and customer service personnel. For a transformation of telephone (or "narrow-band") transmission into "broadband" cable transmission including video-channels, one would have to replace the regular telephone wiring by a coaxial cable or optical fiber, a move that would also increase the potential of telephone communications considerably. ¹⁵⁴ Such upgrading by the use of optical fiber is already part of telephone companies' long-range planning. ¹⁵⁵ The cable industry's [*244] fierce opposition to the possibility of telephone companies' entry into cable distribution is thus not surprising. ¹⁵⁶ Given the telephone companies' technical competence, financial and political connections, local facilities, and ability to cross-subsidize their cable service from other activities, they could be expected to be formidable candidates to win cable franchises. ¹⁵⁷

Cable companies also have a very practical reason for opposing the entry of telephone companies into cable television. Due to the latter's ownership of utility poles and underground ducts, cable companies are dependent on them for reaching subscribers, without having to duplicate these facilities. The FCC, in its *Final Report and Order* prohibiting the so-called cross-ownership by telephone companies of cable operators, found that a telephone company "has effective control of the pole lines (or conduit space) required for the construction and operation of CATV systems. Hence, the telephone company is in an effective position to preempt the market for this service. . . ." ¹⁵⁸ To deal with this problem, a Pole Attachment Law was enacted in 1978 ¹⁵⁹ though cable operators are still complaining about harassment by the telephone companies. ¹⁶⁰

From the government's point of view, a major reason for the exclusion of telephone companies from cable television service is the predominance of one company, the American Telephone and Telegraph Company, over national wire communications. Thus, even before the advent of cable television, government regulators had long felt that the Bell System was too powerful and difficult to control, and that its ability to cross-subsidize an unregulated non-telephone operation by shifting part of its cost into the expenses of the regulated telephone service permitted it to compete unfairly in the former. Given this apprehension, it is not surprising to find strong sentiments against letting the Bell System expand beyond its traditional telephone business into the carrying and control of video [*245] signals. Starting with the 1913 "Kingsbury commitment", ¹⁶¹ in which AT&T agreed to sell its controlling interest in Western Union and thus in telegraphy, ¹⁶² governmental policy has consistently favored a containment of the Bell System. The FCC's position, in issuing its 1970 order prohibiting cross-ownership ¹⁶³ was that "telephone company preemption of CATV service in a community not only tends to exclude others from entry into that service, but also tends to extend, without need or justification, the telephone company's monopoly position to broadband cable facilities." ¹⁶⁴ The Justice Department's view, as summarized by the Commission, was "that there is a serious danger that the existing local monopoly position of the telephone companies as communications common carriers may

prevent the development of an independent CATV industry." 165

Thus, the combination of economic opposition by cable companies and broadcasters and governmental opposition to a potential Bell control over several communications media has led to telephone companies' general exclusion from the cable market. 166 In the past, AT&T's entry has also been restricted by the 1956 consent decree which barred it from engaging in "any business other than the franchising of common carrier communications services." 167

Some commentators on cable communications challenge the wisdom of excluding telephone companies from cable service. Sidney Dean, a leading public interest advocate of unrestructured cable access, has argued for letting telephone companies enter freely as common carriers of cable transmissions, in preference to the current system. 168 Even the FCC and Congress are reviewing the rules against cross-ownership [*246] at present. 169 However, recent reports suggest that the Commission will not substantially alter its policy. 170

The prohibition of cross-ownership has permitted, and indeed nurtured, the establishment of cable companies as a second type of communications monopolist, carefully kept apart from the existing telephone monopoly. However, the logical pro-competitive policy would be the exact opposite; it would permit telephone companies to provide cable service in *competition* with existing cable companies, and at the same time would permit the latter to use part of their broadband spectrum for switched voice transmission, *i.e.*, telephone service. Under such a system, cable and telephone services would cease to be monopolists in their respective communications sub-markets and would instead have to compete with each other in an integrated and larger market. 171

Because the establishment of competition is at the heart of the proposal, it is important not to let the telephone companies simply enter cable operations as they please or to acquire local *monopoly* franchises. Instead, they must be permitted to enter only where a cable company is already fairly well established. Although by having a single carrier (such as a telephone company) provide all communications services one reaps the economies of large scale and avoids some duplication of facilities, such advantages are static in nature, *i.e.*, production may be efficient within a given technology, but the latter does not necessarily advance as rapidly as it would in a competitive system. By pitting large carrier systems against each other one encourages a dynamic development of technology and applications, 172 and at the same time reduces the need for regulation.

Granting a cable company an "infancy" period until it is well-established and ready for competition with the powerful [*247] telephone companies, particularly the Bell System, gives a cable operation a chance to lay its hardware, develop a customer base, and achieve local acceptance. To assure this readiness, a precondition for entry by a telephone company could be that a certain percentage of households have become subscribers of cable television. 173 At the same time, no cable company should be able to ward off a competitive entry by telephone companies simply by hovering below the threshold percentage, or by choosing not to supply telephone services. Time limitation on the protected period would see to that. In any event, since the introduction of coaxial or optical fibers into homes is still several years away, the entry of telephone companies is not likely to be immediate, giving cable companies more time to gain strength.

Subjecting cable franchises to competition by telephone companies does not preclude other *cable* companies from entering as well. However, as has been argued above, this is not likely to occur beyond some instances of cream skimming 174 or outside contested border regions between cable systems.

Since the goal of the proposal is to create *intramedium* competition, it would not be benefitted by the demise of the existing cable company in a locality due to telephone competition. Neither telephone nor cable companies would necessarily overwhelm the other by simply being larger. Even if a cable system were to shrink substantially, it would still remain a competitor in the market and a restraint to the telephone company. 175 One of the theoretical results of recent studies of competitive behavior is that the number of actual or potential rivals need not make a difference to competitive behavior. 176

[*248] There may be instances, however, in which the entry of a telephone company will lead to the demise of a cable operation. In these instances, as long as no unfair competitive practices were employed, it stands to reason that an integrated broadband service provided by the telephone company is the more efficient way of video transmission. 177 Such efficiencies, where they exist, ought not be artificially restricted. As Commissioner Fogarty observed,

the Commission must . . . confront the possibility that the prospect of merging fiber optic technology with the local loop of the telephone exchange may offer "natural monopoly" economies in the provision of broadband facilities and services which a sound and rational policy analysis cannot ignore. If these economies emerge in significant magnitude, then telephone company competition in the cable television marketplace may be unfair only in the sense that it may be inherently unbeatable. If this should prove to be the case, the hard but necessary answer may have to be that the public interest is better served by such unfairness. 178

The potential for unfair competition lies in the already mentioned discrimination in pole attachment -- a matter that legislation can largely alleviate -- and in telephone companies' ability of cross-subsidizing their unregulated operations by shifting costs attributable to them into its regulated telephone services, thus gaining a competitive advantage over cable operators. ¹⁷⁹ This potential concern is not shared by many regulators. The New York State Public Service Commission staff, in its submission to the FCC, stated

Cross-subsidization between cable television and telephone subscribers, if both services are provided by the same company, is [*249] also unlikely to occur in this state . . . Revisions to our Uniform System of Accounts are currently underway which will extend [cost aggregation] accounting to other non-monopoly enterprises in which the telephone industry may become involved . . . As a result, if telephone companies in this state begin providing cable television service, all capital costs and operating expenses directly attributable to those enterprises will be properly identified, thereby precluding them from being supported by monopoly service telephone rate payers. ¹⁸⁰

Clearly, this attitude is not shared by the FCC's staff, ¹⁸¹ which gives much weight to the potential for cross-subsidization. Of course, this argument would also apply equally for the ownership of cable facilities by telephone companies when they are *leased* to independent cable operators, which is permissible under present FCC rules. But even ignoring this inconsistency in policy and the state regulators' confidence that the problem can be contained the question remains what price one is willing to pay in order to eliminate every conceivable source of cross-subsidy. Within the FCC the staff report's recommendation to continue the cross-ownership ban has led to vigorous disagreement.

Indeed, continuation of the prohibition on telephone company-cable cross-ownership will seriously retard, if not completely preclude, the introduction and deployment of broadband, fiber-optic technology in the local telephone exchange. It will be the American consumer who will suffer the loss of telecommunications benefits directly attributable to this myopic policy recommendation. ¹⁸²

One should not be pessimistic about the future of the cable industry under competition. Many of the leading cable companies have an excellent record of innovation, and they should be able to hold their own against the slower moving Bell system. And if some operators fail, they could be acquired by the more successful companies, which would then realize economies of a large scale, *if* these exist. (A necessary restriction, however, would be to preclude the successful telephone company from acquiring the assets of a failing cable competitor, and vice versa.) At present, cable companies are eagerly [*250] sought-after targets for acquisition by major corporations. ¹⁸³ As this process continues, existing cable systems become parts of some of the largest business corporations of the country, drawing on the latter's resources and management, and becoming less in need of shelter from telephone competition.

The advocated system will tend to reduce future profits relative to those expected under a monopoly, and hence make investment by venture capital less attractive. ¹⁸⁴ However, the expected growth of the entire video market should leave cable companies with a formidable slice even if their share is smaller than today's. The present surge of investors into cable television and the scramble for franchises suggests an expectation of above-normal profits in the intermediate and long run. A reduction in the expected rate of return will not dry up, but only reduce, investment funds. If necessary, the FCC could grant longer infancy periods in special circumstances to assure the entry of viable cable companies, and to permit them to develop a foothold into communications services that are presently the preserve of telephone companies.

The other side of the coin, if barriers between telephone and cable are removed, is the opening of telephone service to cable operators. There is enough room on a standard coaxial cable to carry thousands of simultaneous voice or data channels in addition to the video offerings. ¹⁸⁵ There is nothing in the cable technology that restricts it to video transmission as opposed to a mixed telephone and video service, ¹⁸⁶ although switching equipment would have to be installed. Broadband cable systems that can provide a mix of communications services have already been developed; an example is the 3M Company's CS<2> carrier system. One such system is operated in Wisconsin by the Chequamegon Telephone Co-op; another is at China Lake, California. Recently, a cable company proposed [*251] a telephone-cable system for Prince George's County, Maryland, which would include switching capabilities and voice, video, and computer circuits. ¹⁸⁷ In New York and San Francisco, banks are already using cable to move data between their different facilities, a function previously filled by the telephone company. ¹⁸⁸

Cable's two-way capability, as well as the application of digital technology, permits its augmentation by dialing and switching. ¹⁸⁹ Putting these capabilities together results in a local telephone network. This local distribution network could interconnect for long distance service with cable networks in other localities, or with telephone companies' local distribution networks, and they could be interconnected either via the Bell System's long distance lines -- their right under the *MCI* decision ¹⁹⁰ -- or via the new long distance carriers such as MCI or Southern Pacific. The latter companies are at present involved in long distance transmission only, without a local distribution network. Their combination with cable systems would therefore complete one or more nation-wide non-Bell networks. An example of this possibility: The above-mentioned cable systems in New York and San Francisco have been experimenting with a connection of those cities via satellite, ¹⁹¹ entirely bypassing the Bell system. That experiment, authorized by the

FCC, involved local distribution by the cable systems of Manhattan Cable in New York and Viacom Cable in California, linked by a satellite of Satellite Business Systems (SBS) and using cellular digital radio and cable TV packet switching by the Local Digital Distribution company (LDD) and by Tymnet. ¹⁹² The type of applications in the demonstration were coast-to-coast [*252] transmission, in a realistic business operating environment, of teleconferencing, high-speed facsimile, computer-to-computer transmissions and terminal-to-host transmissions. ¹⁹³

Competing local telephone services existed in the telephone's early stages, after the expiration of the original Bell patents. They were eventually replaced by a system of non-overlapping local or regional monopolies. At the time, public policy did not favor the duplication of facilities and the fragmentation of telephone subscribers into groups that were unable to talk to each other. Such duplication of identical services is not at issue here, because two types of different communication wires already enter a large and increasing number of households. The second set of wires -- that of cable communications -- exists partly because of federal policy not to grant too much power to telephone companies, in particular to AT&T, which has prevented the consolidation of telecommunication services onto one cable. But once that second form of access exists, it is logical to use it for competitive purposes.

The proposed opening of the telephone industry to competition by cable operators would introduce rivalry and contestability into *local* telephone distribution. This is the last area of telephony where competition has been conspicuously missing, ¹⁹⁴ whereas the terminal equipment market, long distance service, and in-house lines have become open to new entrants, and will be even more competitive in the future. Long distance calls comprise only twenty percent of total phone bills and even smaller share of the number of calls. Local service has also experienced bottleneck conditions -- i.e., periodically recurring capacity shortages -- which may be alleviated by the emergence of alternative services. ¹⁹⁵

The FCC staff's cable cross-ownership report -- argues in favor of an independent and viable cable medium as a competitor to the local distribution of telephone companies. Yet from that competitive premise the report reaches a protectionist conclusion. Cable [*253] television is indeed a potential competitor, and it has been fostered during its infancy period towards an ability to assume such role. Yet there is no reason why such competition ought to be a one-way street, with cable television protected from the incursions of telephone companies.

The advantages of such a rivalry may be gleaned from one of the rare instances of head-on competition, that of bank data transmission in New York City. The Chase Manhattan Bank analyzed in 1977 the cost differences between telephone and cable transmission and concluded in an intra-office memo:

Even with the higher installation cost which is due to them [Manhattan Cable] having to run cable into both sites and cable the buildings, the cost saving over New York Telephone for the first year is \$ 10,000.00 and \$ 15,000.00 every year after.

There are several other advantages in using Manhattan Cable:

1. Fast response to service calls
2. Use of modems with up-to-date technology
3. Very low cost for installation for any additional circuits required at these sites since buildings will be cabled. ¹⁹⁶

Permitting the telephone companies to provide an alternative video transmission service would also solve several problems. Most importantly, the presence of an alternative source of viewing fare would remove the problem of a local cable monopoly over programming. The alternative telephone cable system would operate as a common carrier, permitting access to anyone who could afford the access fee. Telephone companies should be comfortable with this status since it is their traditional mode of operation. Conventional cable operators would continue in their present dual roles of distributor and programmer, although they could provide unregulated common carrier channels as well.

A competitive setting would also eliminate the need for regulating the *access* rates that are charged by cable operators to suppliers of programs. ¹⁹⁷ Provided only that no collusion takes place, the easy availability of an alternative cable service should keep access rates moderate. In a competitive setting, no [*254] regulation would be necessary other than a protection against cross-subsidization from monopolistic parts of the telephone system. This restriction already exists and has been recently strengthened by the FCC's concepts of fully separated subsidiaries of its *Computer Inquiry II* ¹⁹⁸ and by the current legislative efforts to rewrite the Communications Act and restructure the Bell System. ¹⁹⁹ The realization of these efforts may provide an answer to the question of how difficult it is to maintain a true separation both between subsidiaries and parent company and between subsidiaries themselves.

Regulating the rate to be charged to subscribers for cable service would be somewhat more complicated. ²⁰⁰ The *basic* charges for cable service would presumably fall to zero since the marginal cost of supplying another subscriber with such programs is very low after installation, and since prices under competition tend to be equal to marginal

cost. ²⁰¹ For the pay services, however, marginal costs are not zero. For example, pay-cable movie suppliers are currently compensated by cable operators on the basis of subscribers to the programs. The operators would hence normally charge subscribers at least that amount. Therefore, the viewing charge will not fall to zero. Still, there may be services where the low cost of supplying additional subscribers generates "cut-throat competition." To prevent this, it is primarily necessary to enforce rules preventing the discrimination in prices between different types of viewers, since the ability to discriminate is the driving force behind such competition.

Some regulation would still be necessary to deal with the new circumstances of the communications industry under this [*255] proposal. For example, the assurance of cable wire attachment to telephone poles at reasonable rates and free of harassment would become even more important if their competition with telephone companies were intensified. This problem, however, seems relatively easy to solve by legislation. Conceptually more difficult is the relation of the telephone companies' competitive operations with the remaining regulated one. It would require some allocation of revenues and expenses among services. Again, such allocation is already extensively practiced among services, companies, and states. The procedure of preventing cross-subsidization is tied to the outcome of telecommunications legislation that is currently pending before Congress, as well as to the details of the pending divestiture of AT&T.

There is also a role for governmental vigilance to prevent collusion between the two rivals. A duopoly could be avoided if additional competitors would enter as well, but, as has been argued above, the likelihood of entrants other than telephone companies is not great. ²⁰²

The AT&T Consent Decree

The recently announced settlement agreement between the Justice Department and AT&T on a Consent Decree, presently pending before the U.S. District Court for the District of Columbia, ²⁰³ is silent on cable television. Under its provision, AT&T would be divested of its Bell Operating Companies (BOCs) and left free to enter unregulated fields such as computer communications, information services, and, by implication, cable television, ownership. Under present legislation and regulations, the divested company would not be subject to the FCC's cross-ownership rules, which would otherwise prevent the company from owning cable systems in the area of its local exchanges.

As a potential cable operator, AT&T would not be different from other MSOs, except that its size and resources are considerably larger, and that it would have a manufacturing [*256] arm in Western Electric. On the other hand, AT&T is far behind in programming experience or franchise acquisition. As an FCC official has observed "[u]ntil somebody comes up with a reason why [AT&T's entry into cable] would be bad, we have no reason to stop it." ²⁰⁴ One such argument could be that by using its cable operations as a local distribution network, AT&T could become again a vertically integrated communications carrier involved in local exchange activities.

On the other hand, the consent decree is stricter with the BOCs, who may not provide "any other product or service, except exchange telecommunications and exchange access service, that is not a natural monopoly service actually regulated by tariff." Does this exclude BOCs from cable television? There is no simple answer to this question. The FCC rules against cross-ownership still apply with full force to BOCs' ownership of cable systems within their own exchange area. On the other hand, they can own cable systems outside that area, a provision of greater practical significance than under the integrated Bell System where few attractive areas were outside that system's exchange control. ²⁰⁵

Yet to own these cable operations, the requirement of "natural monopoly service actually regulated by service" would still have to be met. This is a vague requirement, ²⁰⁶ but one which could include cable television system ownership, provided that it is regulated by a tariff and that it is restricted to naturally monopolistic operations. That would in all likelihood include transmission services but preclude programming.

Neither would cross-ownership rules prevent the offering of broadband cable services as part of integrated communication services *within* a BOC's area of exchange. Under II(D)(3), BOCs should be able to provide tariffed broadband services, as long as the vague "natural monopoly" requirement is met. The latter, again, will hold for the transmission of cable television, but not for its programming aspects.

The conclusion is therefore that under present legislation [*257] and regulations, the Decree would leave BOCs free to offer broadband video transmission services in their area of exchange and elsewhere, provided they operate as regulated common carriers.

CONCLUSION

The proposed system of two initially distinct media checking each other is the by-product of new technological developments and initial regulatory responses. The entry of cable television into the American household was not planned as part of an alternative telecommunications system. But now that it is becoming a fact, one should make the most of it. Cable companies will be capable of providing switched voice communication, *i.e.*, telephone services,

and it will be difficult to preclude them for long from selling these services. Similarly, especially with the introduction of optical fibers to households, telephone companies will have the technical capability to provide video service. Again, it will not be feasible to contain the possibilities of the technology and to deny their services to consumers. If technology is destiny, it spells out a future of integrated telecommunications. Where once television and telephone were very different, they have become increasingly related as alternative uses of available cable channels. It is therefore senseless to cling to market definitions of yesterday and to restrict companies to one or the other of these markets. As markets integrate, competition should not be contained. In this case, such integration provides the key to a structural solution to thorny monopoly issues in telecommunications.

Legal Topics:

For related research and practice materials, see the following legal topics:

Communications Law
Cable Systems
Leased Commercial Access
Communications Law
Cable Systems
Public Access
Communications Law
Broadcasting
Licensing
Renewals & Revocations
Renewals

FOOTNOTES:

¹ See, e.g., *United States v. Western Electric Co.*, Civil Action No. 17-49 (D.C.N.J. Jan. 14, 1982) (Modification of Final Judgment).

² See, e.g., F. BROCK, *THE TELECOMMUNICATIONS INDUSTRY: THE DYNAMICS OF MARKET STRUCTURE* (1981). For an overview of industry trends see MAJORITY STAFF OF THE SUBCOMM. ON TELECOMMUNICATIONS, CONSUMER PROTECTION, AND FINANCE OF THE HOUSE COMM. ON ENERGY AND COMMERCE, *TELECOMMUNICATIONS IN TRANSITION: THE STATUS OF COMPETITION IN THE TELECOMMUNICATIONS INDUSTRY*, 97th Cong., 1st Sess. (1981) [hereinafter cited as *TELECOMMUNICATIONS IN TRANSITION*].

³ See, e.g., Chazen and Ross, *Federal Regulation of Cable Television: The Visible Hand*, 83 HARV. L. REV. 1820 (1970); DEREGULATION OF CABLE TELEVISION (P. Macavoy ed. 1977); Comanor and Mitchell, *The Costs of Planning: The FCC and Cable Television*, 15 J. OF LAW & ECON. 177 (1972); and M. HAMBURG, *ALL ABOUT CABLE: LEGAL AND BUSINESS ASPECTS OF CABLE AND PAY TELEVISION* (1979).

⁴ See, e.g., SLOAN COMMISSION ON CABLE COMMUNICATIONS, *ON THE CABLE: THE TELEVISION OF ABUNDANCE* (1971).

⁵ *FCC v. Midwest Video Corp.*, 440 U.S. 689 (1979).

⁶ See, e.g., Sucherman, *Cable TV: The Endangered Revolution*, COLUM. JOURNALISM REV., May-June 1971, at 13.

⁷ On diversity in the media, see Baxter, *Regulation and Diversity in Communications Media*, 64 AM. ECON. REV. 392 (1974).

⁸ Ross, *Economic and Legal Foundations of Cable Television*, SAGE RESEARCH PAPERS IN THE SOCIAL SCIENCES, #90-012 (1974).

⁹ The large majority of these are channels for video transmission to the public. In New York City, one franchise applicant proposed a 269 channel system.

¹⁰ See J. Taylor, *Not Enough Channel Capacity? 'Supercable' to the Rescue*, CABLE AGE, May 18, 1981, at 21.

¹¹ Rules re Microwave Served CATV, 38 F.C.C. 683 (1965); Second Report and Order, 2 F.C.C.2d 725, 6 R.R.2d 1717 (1966).

¹² See Donaldson, Lufkin and Jenrette, *Industry Viewpoint: Cable Television 1981*, Feb. 1981, at 34.

¹³ See Baker, *Nail By Nail*, CABLEVISION, Mar. 1, 1982, at 21.

¹⁴ Westinghouse is the second largest U.S. pay-TV supplier. CABLEVISION, Dec. 11, 1981, at 151.

¹⁵ Westinghouse also owns Group W, which produces and syndicates programs.

¹⁶ BROADCASTING, Dec. 7, 1981, at 34.

¹⁷ Donaldson, Lufkin and Jenrette, note 12 *supra*, at 18.

¶n18. For Hollywood producers, accommodations with pay cable have become essential. "'By 1985,' says [a Warner-Amex official], 'pay revenues will surpass theatrical. We project that the box office take will be \$ 1.4 billion and pay TV's \$ 1.7 billion.'" Baker, *Nail by Nail*, CABLEVISION, Mar. 1, 1982, at 35. Recent months have seen the aggressive entry of cable program suppliers into program production. The industry leader HBO, for example, acquired exclusive rights to Columbia Picture Film products in exchange for sharing up-front production costs. CABLEVISION, Jan. 25, 1982, at 18. Similarly, Showtime has contracted for the production of the first-ever serial program that is exclusive to cable. MULTICHANNEL NEWS, Mar. 8, 1982, at 41.

¶n19. The first movie made for pay-cable was recently announced. Levy, *Home Box Office Opens Made-For-Pay Film Era*, MULTICHANNEL NEWS, Sept. 21, 1981, at 1.

¶n20. See Objection filed by CNN in FCC File No. CAR-15534-09.

¶n21. FCC NETWORK INQUIRY SPECIAL STAFF, NEW TELEVISION NETWORKS: ENTRY, JURISDICTION, OWNERSHIP, AND REGULATION (Final Report) at III-95 (1980) [hereinafter cited as NETWORK INQUIRY FINAL REPORT].

¶n22. Given the scarcity of superior talent and outstanding programs, an increase of programs ought to lead to an increase in their price. A monopsonist thus faces an upwardly sloping supply curve.

¶n23. The FCC's staff analysis would hold only if the cable operator could discriminate perfectly, or at least in a way that makes the buyer better off than vertical integration would, or if increasing marginal costs are *entirely* due to scarce factor rents, *i.e.*, if no producer surplus exists.

¶n24. This is not to deny, however, that there may be efficiency reasons for some vertical integration. In another in-depth FCC staff report, dealing specifically with cross-ownership and vertical integration of cable television, the potential motives for vertical integration are acknowledged, such as the impossibility of implementing a perfect price "squeeze," and the facilitation of price discrimination. FCC STAFF REPORT, FCC POLICY ON CABLE OWNERSHIP 111-12 (Oct. 1981) [hereinafter cited as FCC CABLE OWNERSHIP REPORT].

¶n25. See B. OWEN, *ECONOMICS AND FREEDOM OF EXPRESSION 2* (1975).

¶n26. *Associated Press v. United States*, 326 U.S. 1, 20 (1945).

¶n27. First Report and Order, in Docket No. 18397, 20 F.C.C.2d 210, 205, 17 R.R.2d 1570, 1574 (1969).

¶n28. See W. K. Jones, *Regulation of Cable TV by the State of New York*, Report to the Commission (1970); L. Johnson, *The Future of Cable Television: Some Problems of Federal Regulation*, Rand Corporation, RM 6199-F (Jan. 1970); D. LEDUC, *CABLE TELEVISION AND THE FCC* (1973); Posner, *Cable Television: The Problems of Local Monopoly*, Rand Report, RM-6309-FF (May 1970); M. SEIDEN, *CABLE TELEVISION U.S.A.: AN ANALYSIS OF GOVERNMENT POLICY* (1972); and Besen, *The Economics of Cable Television 'Consensus'*, 17 J. LAW & ECON. 39 (1974).

¶n29. Posner, *Cable Television: The Problem of Local Monopoly*, Rand Report RM-6309-FF (May 1970) at 1.

¶n30. Almost 3,000 of the approximately 4,200 systems have capacities of 12 channels or less. TELEVISION DIGEST, TELEVISION FACTBOOK 1980, Vol. 49(2), at 86-a.

¶n31. SLOAN COMMISSION ON CABLE COMMUNICATIONS, *ON THE CABLE: THE TELEVISION OF ABUNDANCE* (1971).

¶n32. *Id.* at 3.

¶n33. L. JOHNSON & M. BOTEIN, *CABLE TELEVISION: THE PROCESS OF FRANCHISING* (1973).

¶n34. The term "separations policy," frequently used interchangeably with "common carrier status," is an imprecise term because it does not specify where, in the totality of functions which a cable operator fulfills, the cut-off between distribution and programming lies. Furthermore, a separation may actually exist under a cable company's total control over programming, as long as some other entity owns or manages the technical facilities, e.g., a telephone company.

¶n35. F. POULEDGE, *AN ACLU GUIDE TO CABLE TV 32* (1972).

¶n36. CABINET COMMITTEE ON CABLE COMMUNICATIONS, *CABLE: REPORT TO THE PRESIDENT*, (1974):

"The private power of the cable system operator is potentially great, because of the local monopoly characteristics of cable. Unless restrained in some manner, the system operator could control all of the channels of his cable system,

which could constitute the bulk of the channels of electronic communications in a particular locale . . . Cable's multi-channel technology, together with the economic imperatives of a medium that is a natural monopoly, could lead to an even greater concentration of power than exists in broadcast television. When a single cable operator has the power to control the programming and information content of all the channels on his system, his monopoly power over the cable medium of expression is nearly absolute. Therefore, detailed and prescriptive regulation by Government is well on its way. . . . The only way to avoid the broadcast regulatory model and allow cable to develop as a medium of communications open and available in a manner similar to the print or film media is to preclude the vertical integration of the programming and distribution function in cable. In this way, the cable operator's distribution monopoly would not produce any concentration of power over free expression in the use of cable channels and would offer no pretext for Government control of programming or other information distributed by cable."

↗n37. FCC v. Midwest Video Corp., 440 U.S. 689 (1979).

↗n38. Second Further Notice of Proposed Rule Making, 24 F.C.C.2d 580, 587 (1970). On the state level, the New York Public Service Commission considered the possibility, subsequent to Commissioner W. K. Jones' proposal, for cable systems to evolve into common carriers. See W. K. Jones, Regulation of Cable TV by the State of New York, Report to the New York Public Service Commission (1970).

↗n39. Cable Television Report and Order, 36 F.C.C.2d 143, 24 R.R.2d 1501 (1972).

↗n40. ACLU v. FCC, 523 F.2d 1344 (9th Cir. 1975).

↗n41. Report and Order, 59 F.C.C.2d 294, 37 R.R.2d 213 (1976).

↗n42. Midwest Video Corp. v. FCC, 571 F.2d 1025, 1051 (8th Cir. 1979). The U.S. Supreme Court affirmed, noting that "access requirements amounting to common carrier obligations . . . , a non-discriminatory system for controlling access, . . . is precisely what Congress intended to avoid . . ." 440 U.S. 689, 705 (1979). See also National Ass'n of Regulatory Util. Comm'rs v. FCC, 533 F.2d 601 (D.C. Cir. 1976) (the FCC's power to regulate activities ancillary to broadcasting did not extend to common carrier, intrastate, point to point transmission of non-video communications).

↗n43. For a description of these forces, see Huffman, *Pressure Grows for Law Requiring Leased Access*, MULTICHANNEL NEWS, Mar. 8, 1982, at 1.

↗n44. One alternative separations policy which would not require rate regulation would be to let market forces determine the price of a channel by auctioning off its use, with part or most of the revenue going to the municipality. This proposal, advanced earlier by the author, could reduce the private monopoly profit of the cable operators (and its incentives) by transferring it to the public. Noam, *Opening Up Cable TV*, New York Times, Mar. 19, 1981.

↗n45. *But see* M. Nadel, *Comcar: An Unregulated Cable Television Franchise Structure* (Mar. 14, 1982) (unpublished manuscript), proposing a common carrier structure which would avoid rate regulation.

↗n46. Simply moving a channel from one service tier to another can make a major difference in its success. See *The Buffalo Shuffle: TMC Gains, HBO Loses 27,000 in Channel Shift*, MULTICHANNEL NEWS, Sept. 14, 1981, at 40.

↗n47. See H. Liberman, *Common Carrier, CATV: Problems and Proposals*, 37 BROOKLYN L. REV. 533 (1971).

↗n48. See generally A. KAHN, THE ECONOMICS OF REGULATION (1971). On the application of regulation to broadcasting, see F. Kahn, *Economic Regulation of Broadcasting as a Utility*, 7 J. BROADCASTING 97 (Spring 1963).

↗n49. 2 A. KAHN, THE ECONOMICS OF REGULATION 13 (1971).

↗n50. Ross, Leonard, *Economic and Legal Foundations of Cable Television*, SAGE RESEARCH PAPERS IN THE SOCIAL SCIENCES, #90-012, 1974.

↗n51. See, e.g., United States v. Western Electric Co., Inc., 1956 Trade Cas. (CCH) P68,246 (D.N.J. 1956) (consent decree).

↗n52. The relationship of regulated and unregulated sectors of the communications industry are discussed in NETWORK INQUIRY FINAL REPORT, note 21 *supra*, at III-103f.

↗n53. J. Barton, D. Dunn, E. Parker, and J. Rosse, *Nondiscriminatory Access to Cable Television Channels*, in STANFORD UNIVERSITY PROGRAM IN INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS (1973); see K. KALBA, SEPARATING CONTENT FROM CONDUIT? (1977); J. Pemberton, *Foreseeable Problems in a System of Maximum Access* (1971) (report paper for Sloan Commission on Cable Communications).

¶n54. Similarly, in the microwave transmission medium (MDS), which operates its two channels under a common carrier status, the first-come, first-serve rules have led to a preemption of many system by large pay-TV suppliers such as HBO. See Comment, *The Development of Video Technology*, N.Y.L. SCH. L. REV. 789 (1980).

¶n55. L. Kestenbaum, *Common Carrier Access to Cable Communications: Regulatory and Economic Issues*, (1971) (report paper for Sloan Commission on Cable Communications).

¶n56. *Local Distribution -- The Next Frontier*, Paper delivered by D. Hatfield at Telecommunication Policy Research Annual Conference, April 1981.

¶n57. K. KALBA, note 53 *supra*, at 79-83.

¶n58. According to the Commission's staff:

Manhattan Cable verbally agreed, after the Show Cause Order in Case 27091 was issued in October 1976, not to further expand its data services if this agency would allow it to continue, without certification, operating its data "experiment" or "field trial" until completion. We agreed to give the company further time to evaluate the technical and economic feasibility of a permanent data offering. However, after about a three year grace period we began to suspect that the company was simply using stall tactics to avoid our jurisdiction.

About a year ago I visited the company, talked with its management, viewed its data facilities, and became aware that it had vastly expanded its data operations. Despite our repeated requests, Manhattan Cable has still not responded to the Show Cause Order, and I expect some additional formal Commission action to occur in the relatively near future. We have no desire to closely or oppressively regulate these services, but we continue to believe that we have an obligation to at least certify their operation as some form of "non-dominant" or "other" common carrier service.

Douglas E. Sieg, Communication to the author, Mar. 5, 1982.

¶n59. For a discussion of the effects of a separations policy in the film industry, see Conant, *The Impact of the 'Paramount Decrees'*, in *THE AMERICAN FILM INDUSTRY* 346-370 (T. Balio ed. 1976).

¶n60. See Coase, *The Economics of Broadcasting*, 36 *AM. ECON. REV.* 440 (1966).

¶n61. Welles, *We Have Seen the Future of Video and It Sure Looks a Lot Like the Same Old Wasteland. Is That Their Fault Or Ours?*, *ESQUIRE*, June 1980, at 89.

¶n62. Steiner, *Monopoly and Competiion in Television: Some Policy Issues*, *THE MANCHESTER SCHOOL* (May 1961), at 107; *Program Patterns and Preferences and the Workability of Competition in Radio Broadcasting*, 66 *Q. J. ECON.* 194 (1952).

¶n63. Owen, Beebe, and Manning, in particular, make this point. They also use simulations to predict the program mix under a variety of assumptions. The results show frequently a greater program variety under a competitive regime. B. OWEN, J. BEEBE, & W. MANNING, *TELEVISION ECONOMICS* (1974); see also, Greenberg & Barnett, *TV Program Diversity -- New Evidence and Old Theories*, 61 *AM. ECON. REV.* 89 (1971); Spence and Owen, *Television Programming Competition and Welfare*, 91 *Q. J. ECON.* 103 (1977); Levin, *Program Duplication, Diversity, and Effective Viewer Choices: Some Empirical Findings*, 61 *AM. ECON. REV.* 81 (1971).

¶n64. These problems would not be eliminated by a change in distribution technology. Under the existing system, all programs are carried on cable to each subscriber, who then selects which one to tune in. A different approach would permit the subscriber to call up his preferred program from central facility. Such a technology has been used in several locations in both the United States and Europe. Under such a method, the cable operator could be a common carrier, although he need not be one. This system, too, would create a distribution monopolist able to control access of suppliers and impose discriminatory access rates.

¶n65. A variant of this approach is the cooperative, in which viewers form an organization to supply themselves with cable programs at a reasonable rate.

¶n66. *CABLE TV REGULATION NO. 137* (Apr. 2, 1981) (Paul Kagan Associates), at 2.

¶n67. *CABLEVISION*, Jan. 18, 1982, at 16; *CABLEVISION*, Mar. 1, 1982, at 69.

¶n68. *CABLE TV REGULATION*, note 66 *supra*, at 1.

¶n69. Bryan, *The New Pot of Gold: Cities Look at Cable TV Communications*, *TV COMMUNICATIONS* (May 1972), at 52.

↗n70. 47 C.F.R. § 76.34 (1980); D. Smith, *Local Taxation of Cable Television Systems: The Constitutional Problems*, 24 CATH. U.L. REV. 755 (1975).

↗n71. Bryan, note 69 *supra*.

↗n72. See, e.g., *Barnstone v. University of Houston*, 660 F.2d 137 (5th Cir. 1981), *rev'g* 514 F. Supp. 670 (S.D. Tex. 1980) (state university-owned public television station did not violate the First Amendment by refusing to broadcast film *Death of a Princess*).

↗n73. CABLE TV REGULATION, note 66 *supra*, at 1.

↗n74. *Id.*

↗n75. *Id.*

↗n76. For broadcasting, see Owen, *Structural Approaches to the Problem of Television Network Economic Dominance*, 1979 DUKE L.J. 191; Fisher, *Community Antenna Television Systems and the Regulation of Television Broadcasting*, 56 AM. ECON. REV. 320 (1966).

↗n77. The problems of broadcast regulation in general are discussed in R. NOLL, M. PECK, & J. MCGOWAN, *ECONOMIC ASPECTS OF TELEVISION REGULATION* (1973), and H. LEVIN, *FACT AND FANCY IN TELEVISION REGULATION: AN ECONOMIC STUDY OF POLICY ALTERNATIVES* (1980).

↗n78. See generally L. JOHNSON & M. BOTEIN, *CABLE TELEVISION: THE PROCESS OF FRANCHISING* (1973).

↗n79. Collins, *The Future of Cable Communications and the Fairness Doctrine*, 24 CATH. U.L. REV. 833 (1975).

↗n80. See text accompanying notes 7-21 *supra*.

↗n81. 47 C.F.R. §§ 76.51-76.65 (1980).

↗n82. Besen & Crandall, *The Deregulation of Cable Television*, 44 LAW & CONTEMP. PROBS. 77, 88 (1981).

↗n83. See BROADCASTING, Oct. 20, 1980, at 30-31; BROADCASTING, Jan. 5, 1981, at 37.

↗n84. MULTICHANNEL NEWS, Aug. 17, 1981.

↗n85. See, e.g., R. FRIEDLANDER & M. BOTEIN, *THE PROCESS OF CABLE TELEVISION FRANCHISING: A NEW YORK CITY CASE STUDY* (1980).

↗n86. 440 U.S. 689 (1979).

↗n87. The economics of public access television are as far removed from Hollywood production as one can imagine. "The only cost to the producer [of public access programs] is the price of studio time -- in the range of fifty dollars an hour. . . . Coca Crystal [the self-styled New York 'Queen of Cable'] subsists partly on food stamps. . . . 'To me, it's amazing that on the same box you can see Bob Hope and Johnny Carson, you can see me on another channel.'" Levy, *Gimme Access*, ROLLING STONE, June 23, 1981, at 61-66.

↗n88. *But see* *Home Box Office v. Wilkinson*, 531 F. Supp. 987 (D.C. Utah 1982) (striking down state statute imposing criminal penalties on anyone who "shall knowingly distribute by wire or cable any pornographic or indecent material to its subscribers").

↗n89. MULTICHANNEL NEWS, Aug. 24, 1981, at 17.

↗n90. *Buckley v. Valeo*, 424 U.S. 1 (1976) (per curiam).

↗n91. *Cf.* *Perry v. Sinderman*, 408 U.S. 493 (1972); *Frost v. Railroad Comm'n*, 271 U.S. 983 (1926).

↗n92. 47 C.F.R. §§ 76.59(b)-(c), 76.61(b)-(f), 76.63-76.161 (1980).

↗n93. *CATV Syndicated Program Exclusivity Rules*, 79 F.C.C.2d 663, 48 R.R.2d 171 (1980), *aff'd sub nom.* *Malrite T.V. of New York v. FCC*, 49 R.R.2d 1127 (2d Cir. 1981), *cert. denied*, 50 U.S.L.W. 3535 (U.S. Jan. 12, 1982).

↗n94. Cities have inserted themselves already indirectly into program selection by frequently expecting franchise applicants to declare how they plan to fill the channels and what pay services they would use. These plans are then

one factor in the award of franchises. Posner, *The Appropriate Scope of Regulation in the Cable Television Industry*, 3 BELL J. ECON. & MGMT. SCI. 98 (1972).

↗n95. Botein, *CATV Regulation: A Jumble of Jurisdictions*, 45 N.Y.U.L. REV. 816 (1970).

↗n96. In *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968), the Supreme Court upheld the FCC's cable regulations, finding them "reasonably ancillary to the effective performance of the Commission's various responsibilities for the regulation of television broadcasting." *Id.* at 178.

↗n97. See *Malrite T.V. of New York v. FCC*, 49 R.R.2d 1127 (2d Cir. 1981), *cert. denied*, 50 U.S.L.W. 3535 (U.S. Jan 12, 1982); *Home Box Office v. FCC*, 567 F.2d 9 (D.C.), *cert. denied*, 434 U.S. 829 (1977).

↗n98. 47 C.F.R. § 76.67 (1980).

↗n99. Whitley, *Cable Television: The Practical Implications of Local Regulation and Control*, 27 DRAKE L. REV. 391 (1977-78).

↗n100. Schwartz, *Is Cable TV Doing Enough In Manhattan?*, N.Y. Times, Nov. 8, 1981, § 2, at 1.

↗n101. See LeDuc, *Control of Cable Television: The Senseless Assault on State's Rights*, CATH. U.L. REV. (1975); W. K. Jones, *Regulation of Cable TV by the State of New York*, Report to the New York Public Service Commission.

↗n102. See text accompanying notes 44-57 *supra*.

↗n103. See, e.g., *Home Box Office v. FCC*, 567 F.2d 9, 26-28 (D.C. Cir.), *cert. denied*, 434 U.S. 829 (1977).

↗n104. *Miami Herald Publishing Co. v. Tornillo*, 418 U.S. 241 (1974); *Home Box Office v. FCC*, 567 F.2d 9 (D.C. Cir.), *cert. denied* 434 U.S. 829 (1977); *cf.* *Community Communications Co., Inc. v. City of Boulder (Boulder II)*, 7 MED. L. RPTR. 1993, 1996-2000 (1981) (holding *Tornillo* inapposite to cable questions); Bazelon, *FCC Regulation of the Telecommunications Press*, 1975 DUKE L.J. 213.

↗n105. Note, *Cable Television and the First Amendment*, 71 COLUM. L. REV. 1008 (1971); Robinson, *The FCC and the First Amendment: Observations on 40 Years of Radio and Television Regulation*, 52 MINN. L. REV. 67 (1967).

↗n106. 440 U.S. 689 (1979).

↗n107. *Id.* at 709, n. 19.

↗n108. *Midwest Video Corp. v. FCC*, 571 F.2d 1025, 1055 (8th Cir. 1978), *aff'd on other grounds*, 440 U.S. 689 (1979); see also *Community Communications Co. v. City of Boulder (Boulder I)*, 630 F.2d 704, 713-14 (10th Cir. 1980) (Markey, C. J., dissenting); *but cf.* *Community Communications Co., Inc. v. City of Boulder (Boulder II)*, 7 MED. L. RPTR. 1993, 1996-2000 (1981).

↗n109. CHANNELS, Oct.-Nov. 1981, at 9.

↗n110. *Home Box Office v. Wilkinson*, 531 F. Supp. 987 (D.C. Utah 1982).

↗n111. Address by David Bazelon, Telecommunications Policy Research Annual Conference, Annapolis, Md., Apr. 1981.

↗n112. See, e.g., B. OWEN, J. BEEBE, & W. MANNING, *TELEVISION ECONOMICS* (1974).

↗n113. For a discussion of the alternatives, see NETWORK INQUIRY FINAL REPORT, note 21 *supra*.

↗n114. K. Glen, Report on Multi-Point Distribution Service (MDS), Prepared for the Network Inquiry of the Federal Communications Commission (1980).

↗n115. Billings, *Direct Broadcasting Satellites and Impact on Other Technologies*, Paper delivered at Telecommunications Policy Research Annual Conference, Annapolis, Md., Apr. 1981.

↗n116. See generally Rice, *Regulation of Direct Broadcast Satellites: International Constraints and Domestic Options*, 25 N.Y.L. SCH. L. REV. 813-862 (1980); FCC OFFICE OF PLANS AND POLICY, *POLICIES FOR REGULATION OF DIRECT BROADCAST SATELLITES* (Oct. 1980).

↗n117. It is also possible for these signals to be received by a cable operator and distributed over his lines. In such a case, DBS does not differ in principle from other means of program delivery to a cable company.

↕n118. See generally H. LEVIN, *THE INVISIBLE RESOURCE* (1971).

↕n119. Communications satellites can be "parked" in space only at a specific height (22,300 miles) and locations (above the equator); to avoid interference, they cannot be too close to each other. Comment, *The Development of Video Technology*, 25 N.Y.L. SCH. L. REV. 789, 809-10 (1980).

↕n120. FCC OFFICE OF PLANS AND POLICY, *POLICIES FOR REGULATION OF DIRECT BROADCAST SATELLITES* (1980), at 97-105.

↕n121. See Comment, note 119 *supra*, at 789-812; Glen, note 114 *supra*.

↕n122. See generally, TELECOMMUNICATIONS IN TRANSITION, note 2 *supra*, at 304.

↕n123. Comment, note 119 *supra*, at 802.

↕n124. *Id.*

↕n125. Park, *The Growth of Cable TV and Its Probable Impact on Over-the-Air Broadcasting*, AMER. ECON. REV. 69 (1971).

↕n126. See generally H. LEVIN, *THE INVISIBLE RESOURCE* (1971).

↕n127. See Barnett, *Cable Television and Media Concentration, Part I: Control of Cable Systems by Local Broadcasters* (pt. 1), 22 STAN. L. REV. 221 (1970).

↕n128. See New York Times, July 14, 1978, at A10; New York Times, Nov. 21, 1978, at A18; BROADCASTING, Nov. 21, 1977, at 42-43.

↕n129. Theoretically, two-way operations could also be set up through a combination of conventional broadcasting and telephone. However, this seems impractical for most applications. A recently proposed "hybrid" of broadcasting and telephone is conceived by its proponents as primarily for non-cable areas. COMMUNICATION NEWS, Sept. 1981, at 9.

↕n130. Several of the recently submitted plans by applicants for New York City's franchises include a free basic service. Similarly, Boston's recently awarded franchise went to a company that set a monthly subscription price of \$ 2 for 52 basic channels. MULTICHANNEL NEWS, Aug. 24, 1981, at 1.

↕n131. B. OWEN, J. BEEBE, & W. MANNING, *TELEVISION ECONOMICS* (1974).

↕n132. Levy, note 87 *supra*, at 61, 64. According to a major advertising agency, the share of pay-cable in total national television audience for late night programs increased by 83% in the past year. MULTICHANNEL NEWS, Aug. 24, 1981, at 62.

↕n133. See CABLE AGE, Feb. 8, 1982, at 27-32.

↕n134. The 1981 world championship welterweight fight between "Sugar Ray" Leonard and Thomas Hearns was a cable success at \$ 15-\$ 20 per household viewing, grossing \$ 6 million in California alone. *Id.*

↕n135. While political pressures may slow this trend, it is doubtful, given the property and copyrights of the producers of particularly attractive events, that the latter could be forced to remain on "free" television. Anti-siphoning rules in cable have been struck down in *Home Box Office v. FCC*, 567 F.2d 9 (D.C. Cir.), *cert. denied* 434 U.S. 829 (1977).

↕n136. Fourth Report and Order in Docket 11279, 15 F.C.C.2d 466, 14 R.R.2d 1601 (1968); 47 C.F.R. § 73.643 (1972); 52 F.C.C.2d 1, 33 R.R.2d 367 (1975).

↕n137. Samuelson, *Public Goods and Subscription TV: Correction of the Record*, 7 J. LAW & ECON. 81 (1964); Minasian, *Television Pricing and the Theory of Public Goods*, 7 J. LAW & ECON. 71 (1964).

↕n138. TELECOMMUNICATIONS IN TRANSITION, note 2 *supra*, at 302-04.

↕n139. CABLEVISION, Dec. 21, 1981, at 151.

↕n140. *Id.*

- ↗n141. For the above-mentioned Leonard-Hearns fight, non-interactive cable systems had to provide throw-away unscramblers for once-only viewing in order to make a per-event charge possible. Most operators found this too costly. MULTICHANNEL NEWS, Sept. 21, 1981, at 1.
- ↗n142. In the noted Hartford experiment on pay-TV and audience preferences, the least watched program, viewed by exactly one household, was "You and the Economy," featuring a panel of Yale economists. NOLL, PECK & MCGOWAN, note 77 *supra*, at 133 n.5.
- ↗n143. The cost of initial installation of cable is higher than those of pay-broadcasting, but not significantly so, considering its range of services. It has been estimated by an industry panel to be \$ 400 per household, up to a 50% cable penetration, versus \$ 165 for STV, \$ 200-300 for DBS, and \$ 75-115 for MDS. MULTICHANNEL NEWS, Sept. 7, 1981, at 7.
- ↗n144. For example, if the access to cable were foreclosed to a program syndicator, he could instead try to sell his show to a broadcast station or network. But it is unlikely that he could command anything approaching the potential revenue for a pay-cable showing.
- ↗n145. See, e.g., F. Kahn, *Cable Competition and the Commission*, 24 CATH. U.L. REV. 854 (1975).
- ↗n146. Kahn and Stelzer, *Communications in New York State*, NEW YORK STATE OFFICE OF DEVELOPMENT PLANNING, TELECOMMUNICATIONS IN NEW YORK STATE: REDEFINING THE ROLE OF GOVERNMENT, at App. B (1981).
- ↗n147. Noam, *Is Cable Television a Natural Monopoly?* (Feb. 1982) (Columbia University Graduate School of Business Research Working Paper #430); Panzar and Willig, *Free Entry and the Sustainability of Natural Monopoly*, 8 BELL J. ECON. 1 (1977).
- ↗n148. Competitive cable television services (known in the industry as "overbuild") exist in less than ten franchises out of 4200, and are usually caused by disputes over the scope of the initial franchise award. Of these operations, only those in Allentown, Pennsylvania, and Phoenix, Arizona, are of appreciable size. Subscriber rates in Allentown are above the national average. Moozakis, *Co-Franchising: Boon or Bane?*, TVC, Dec. 1, 1981, at 68.
- ↗n149. Johnson and Blau, *Single versus Multiple-System Cable Television*, 18 J. BROADCASTING 323 (1974).
- ↗n150. See note 148 *supra*.
- ↗n151. Final Report and Order, 21 F.C.C.2d 307, 18 R.R.2d 1549 (1970); see also FCC CABLE OWNERSHIP REPORT, note 24 *supra*, at 143.
- ↗n152. 47 C.F.R. § 64.601(a) (1980). An exception to the prohibition of cross-ownership is available through a waiver procedure for areas where cable franchises would not exist otherwise. *Id.* So far, waivers have been granted in 96 cases. FCC Master Waiver Log, reported in National Cable Television Association, Comments to the FCC, FCC Docket No. 80-767, April 1981. AT&T's future ability to enter cable television, under the terms of the Consent Decree presently pending before the U.S. District Court for the District of Columbia, note 1 *supra*, are discussed below.
- ↗n153. 47 C.F.R. § 64.602 (1980); Report and Order, FCC 79-755, Nov. 29, 1979, at 23. Recently, the FCC exempted rural areas from cross-ownership rules. 84 F.C.C.2d 335. To qualify, a telephone company's entire cable television area must be rural. TELEPHONY, Nov. 16, 1981, at 11. The Commission also released a staff report which, while recommending the abolition of cross-ownership restrictions on television broadcasters and networks, argues against telephone companies' ownership of cable. FCC CABLE OWNERSHIP REPORT, note 24 *supra*.
- ↗n154. J. CUNNINGHAM, CABLE TELEVISION (1976).
- ↗n155. *Id.*
- ↗n156. Hill, *The Bell Settlement: The Threat Becomes Clear*, TVC, Feb. 15, 1982, at 52.
- ↗n157. Smith, *Local Taxation of Cable Television Systems: The Constitutional Problems*, 24 CATH. U.L. REV. 755 (1975).
- ↗n158. 21 F.C.C.2d 307, 324, 18 R.R.2d 1549, 1567 (1970).
- ↗n159. P.L. No. 95-324.
- ↗n160. See FCC CABLE OWNERSHIP REPORT, note 24 *supra*, at 162-63.

↕n161. See F. BROCK, note 2 *supra*.

↕n162. Similarly, in 1925 AT&T divested itself, under government pressure, of its international telephone operations, and in 1926 from its domestic broadcast interests. In 1935, it exited from the talking motion picture business. *Id.*

↕n163. Final Report and Order, 21 F.C.C.2d 307, 18 R.R.2d 1549 (1970).

↕n164. *Id.* at 324, 18 R.R.2d at 1568.

↕n165. *Id.* at 314, 18 R.R.2d at 1557.

↕n166. 47 C.F.R. § 64.601(a) (1980).

↕n167. United States v. Western Electric Co., Inc., 1956 Trade Cas. (CCH) P68,246 (D.N.J. 1956).

↕n168. Communication to the author, Aug. 1981.

↕n169. FCC CABLE OWNERSHIP REPORT, note 24 *supra*.

↕n170. *FCC Study Said to Back Telco Ownership Ban*, MULTICHANNEL NEWS, Sept. 21, 1981, at 4.

↕n171. The separation between cable and telephone communications, regulation-induced as it may be, has nevertheless created certain psychological barriers. "The telephone companies and the cable television (CATV) industry know very little about each other." Barbera, *The Cable-Phone Relationship: A New Partnership Being Born?*, TELEPHONY, Aug. 17, 1981, at 20.

↕n172. J. SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY (1950); E. MANFIELD, INDUSTRIAL RESEARCH AND TECHNOLOGICAL INNOVATION (1968).

↕n173. This infancy period is analogous to William K. Jones' transition period leading to a common carrier status. W. K. Jones, *Regulation of Cable TV by the State of New York*, Report to the New York Public Service Commission (1970).

↕n174. See text accompanying notes 147-150 *supra*.

↕n175. Baumol, *Contestable Markets: An Uprising in the Theory of Industry Structure*, 72 AM. ECON. REV. 1 (1982). These views are presented in more detail in BAUMOL, PANZER & WILLIG, CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE (1982).

↕n176. Even if cable television transmission is a natural monopoly, i.e., it exhibits continuously falling average costs, 2 KAHN, note 48 *supra*, at 119-22, such findings are conclusive only for the single product firm, that is, a pure cable operator, but not necessarily for a "multi-product" firm such as a telephone company for which cable transmission is part of joint product (integrated communications services). This distinction is between "economies of scope" and the more conventional "economies of scale". Panzer and Willig, *Free Entry and the Sustainability of Natural Monopoly*, 8 BELL. J. ECON. 1 (1977).

Recent work by noted economists has stressed the importance of "contestable" markets, in which monopolists are required to behave as competitive firms would if entry by a rival is possible. Such potential entry would therefore exist even if either of the two transmission modes gains an advantage over the other. Baumol, *On the Proper Cost Tests for Natural Monopoly in a Multiproduct Industry*, 67 AM. ECON. REV. 809 (1977); Baumol, Bailey and Willig, *Weak Invisible Hand Theorems on the Sustainability of Multiproduct Natural Monopoly*, 67 AM. ECON. REV. 350 (1977).

↕n177. See, e.g., Rural Electrification Administration, *The Economies of Rural Telephone and CATV Integration*, Aug. 22, 1977.

↕n178. Waiver of Cross Ownership Rules, 82 F.C.C.2d 266, 273 (1980) (separate stmt. of Comm'r Fogarty).

↕n179. 1 KAHN, note 48 *supra*, at 102-03, 143, 190-91.

↕n180. F.C.C. Docket CC 80-767, Apr. 1, 1981.

↕n181. FCC CABLE OWNERSHIP REPORT, note 24 *supra*, at 154-58.

↕n182. Final Report and Order, 21 F.C.C.2d 307, 18 R.R.2d 1549 (1970) (Fogarty, Comm'r, concurring).

- ↗n183. For example, American Express, Westinghouse, General Electric, Time, Inc., and the New York Times have acquired major cable systems. Donaldson, Lufkin, and Jenrette, note 12 *supra*, at 63.
- ↗n184. Dent, *Booby Traps of Cable TV Appraisal*, BANKING, March 1977, at 100; see also Goldberg, *Marginal Cost Pricing, Investment Theory and CATV: Comment*, 14 J. LAW & ECON. 513 (1971).
- ↗n185. J. CUNNINGHAM, note 154 *supra*.
- ↗n186. See Nicholson, *Will Cable Operators Provide Subscribers with Video Telephones?*, TVC, May 15, 1979, at 158.
- ↗n187. Barbera, *The Cable-Phone Relationship: A New Partnership Being Born?*, TELEPHONY Aug. 17, 1981, at 20.
- ↗n188. See MULTICHANNEL NEWS, Dec. 7, 1981, at 1.
- ↗n189. See generally Campbell, *An Integrated Urban Communications System*, 77 J. SMPTE 1324-26 (1968); *Design Parameters for Integrated Urban Communications*, 79 J. SMPTE 532-35 (1970).
- ↗n190. MCI Telecommunications Corp. v. FCC, 580 F.2d 590 (D.C. Cir.), *cert. denied*, 439 U.S. 980 (1978) (requiring AT&T to grant access to competitors under common carrier service obligations).
- ↗n191. Pollack, *Bell Facing Fresh Challenge*, N.Y. Times, Aug. 28, 1981, at D1.
- ↗n192. For details of the operation, see *Multichannel Industries Aim at Growing Business Data Markets*, MULTI-CHANNEL TECHNOLOGIES REPORT, March 1, 1982, at II-18.
- ↗n193. Among the use-participants in these experimental services were American International Group Realty, American International Companies, Control Data Corporation, Depository Trust Company, Wells Fargo Bank, ITT World Communications, Merrill, Lynch, Fenner and Smith, and RCA Americom.
- ↗n194. TELECOMMUNICATIONS IN TRANSITION, note 2 *supra*, at 206.
- ↗n195. J. CHARTER, D. HATFIELD, & R. SALAMON, LOCAL DISTRIBUTION -- THE NEXT FRONTIER, U.S. Dept. of Commerce (April 1981).
- ↗n196. Cited in K. KALBA, SEPARATING CONTENT FROM CONDUIT? (1977).
- ↗n197. Cf. Ohls, *Marginal Cost Pricing, Investment Theory and CATV*, 13 J. LAW & ECON. 439 (1970) (broadcast time pricing); Squire, *Some Aspects of Optimal Pricing for Telecommunications*, 2 BELL J. ECON. & MGMT. SCI. 515 (1971).
- ↗n198. Computer Inquiry II, 77 F.C.C.2d 384, 47 R.R.2d 669, *modified*, 84 F.C.C.2d 50, 48 R.R.2d 1107 (1980), *appeal pending sub nom.* C.C.I.A. v. FCC, Case No. 80-1471 (D.C. Cir. 1980).
- ↗n199. See S. 898, 97th Cong., 1st Sess. (1981).
- ↗n200. On television pricing, see Minasian, *Television Pricing and the Theory of Public Goods*, 7 J. LAW & ECON. 71 (1964); Samuelson, *Public Goods and Subscription TV: Correction of the Record*, 7 J. LAW & ECON. 81 (1964); and Peterman, *Concentration of Control and the Price of Television Time*, 61 AM. ECON. REV. 71 (1971).
- ↗n201. This decrease in the price for basic service is occurring already, even without competition, since it lures subscribers to the lucrative pay services and provides an audience for advertising messages. The presence of competition, however, would assure the continuance of this trend.
- ↗n202. See text accompanying notes 147-150, *supra*.
- ↗n203. United States v. American Telephone and Telegraph Company, Civil Action No. 74-1698 (D.C.D.C.), modifying United States v. Western Electric Co., Inc., Civil Action No. 17-49, (D.C.N.J. Jan. 14, 1982) (Modification of Final Judgment).
- ↗n204. CABLEVISION, Jan. 25, 1982, at 27.
- ↗n205. United States v. Western Electric Co., Inc., Civil Action No. 17-49, slip op. at section II(D)(3) (D.C.N.J. Jan. 14, 1982).
- ↗n206. No definition for "natural monopoly" is supplied, nor is it specified what to do if the naturally monopolistic services would become competitive in the future.