

The Cable Fable Revisited: Discourse, Policy, and the Making of Cable Television

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□—*Around 1970, utopian talk about cable television as a dramatic “new technology” swept through the policy arena. Analyzing the talk as a discursive practice demonstrates both the value of discourse analysis and some contradictions of the policy process. The talk treated cable as an autonomous technology and consequently obscured political and economic conditions while exaggerating cable’s uniqueness; these characteristics encouraged the reconceptualization of cable in the policy arena in a way that, in combination with several other forces, led to the reregulation of cable and its subsequent growth. The discourse thus helped shape an institution that it failed to describe.*

IN 1974, Brenda Maddox introduced a book chapter titled “From CATV to Infinity” with the following passage:

An almost religious faith in cable television has sprung up in the United States. It has been taken up by organizations of blacks, of consumers and of educational broadcasters, by the Rand Corporation, the Ford Foundation, the American Civil Liberties Union, the electronics industry, the Americans for Democratic Action, the government of New York City, and—a tentative convert—the Federal Communications Commission. The faith is religious in that it begins with something that was once despised—a crude makeshift way of bringing television to remote areas—and sees it transformed over the opposition of powerful enemies into the cure for the ills of modern urban American society. (p. 145)

Today, it is hard not to think that this passage was written with irony. From the perspective of 1987, when for most

people cable means MTV, HBO, and reruns, the notion that cable television could be a “cure for the ills of modern urban American society” seems an exaggeration to say the least. But the author, in 1974, was speaking with serious admiration: “The intriguing thing about cable television,” she continued, “is that this faith may be in no way misplaced.”

Maddox’s passage is an example of what I call the “discourse of the new technologies,” a pattern of talk common in the policy-making arena around 1970.¹ In the following pages I will argue that in a short period, roughly between 1966 and 1970, a new way of talking and understanding became attached over the home delivery of television signals by wire, and this in turn echoed back on developments in the field of media policy.² It became possible to act in the policy arena in new ways because a new discursive field, a new set of ways to do things with words, was opened up. As a result, the ways policy

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makers conceptualized and acted upon television, satellites, data communications, and telecommunications in general were transformed subtly. Most importantly for my argument, the discourse shifted the terrain of action surrounding cable television and helped set the stage for cable's subsequent growth. I argue, in sum, that our understanding of policy events can benefit from the close, empirical analysis of something that is traditionally dismissed or trivialized by policy studies: policy discourse.³

The linchpin of my argument is the FCC's regulatory about-face on the cable issue in the early 1970s. Without that reversal, cable could not have grown into a major fixture of the American media system, and without the discourse of the new technologies that reversal could not have happened, at least not in the way it did. I hope to demonstrate, using empirical evidence, that the discourse made a concrete, if modest, difference. The discourse was not *the* underlying cause of the FCC's reversal; it was just one of many conditions, all of which combined to create the situation we have today. But it was more than simply an ephemeral policy vogue, more than a pale reflection of "real" processes taking place elsewhere.

The discourse had its effect because its structure—its particular mixture of themes, blind spots, and gaps—made possible an odd alliance between the community antenna television (CATV) industry, certain professional groups, and some liberal progressive organizations. The discourse created a terrain that helped make possible some major actions in the policy arena, actions that simple self-interest—of either a pluralist or Marxist, class variety—would not warrant. The goals, interests, and philosophies of the many contributors to the discourse of the new technologies were

widely varied, sometimes to the point of being mutually antagonistic. Yet the participants did not understand the alliance as a compromise between groups with different but overlapping interests; rather, they saw it as a solid consensus, as what one policy activist dubbed "a great and growing body of competent, impartial opinion." The new discursive field helped create a *sense* of expert consensus, of unity and coherence where there actually was a variety of conflicting motivations, attitudes, and opinions.

Somewhat paradoxically, the gaps and contradictions in the new field of discourse, its lack of internal unity, made possible the sense of unity on the level of policy action. The gaps and contradictions played an important, double role. On the one hand, they allowed some to look out on the field and see a view very different from the view others saw; each group saw in the discourse a vision in the service of its goals and ignored crucial differences and potential conflicts with other groups. On the other hand, the gaps and contradictions allowed the discourse to unite all these diverse viewpoints in terms of a shared sense of awe and excitement. Maybe the "new technologies" of cable were good; maybe they were bad, but in any case they inspired a sense of urgency, of possibility, and of a need for action, for response. By creating a terrain for collective action while simultaneously obscuring underlying conflicts, the discourse of the new technologies played a central role in galvanizing the FCC's reversal on the CATV issue.

My claim is not that the FCC's reversal was simply the outcome of a struggle between interest groups. The discourse's effect cannot be reduced to the needs or intentions of those who gave birth to it. Neither is my claim that policy events are merely symbolic window dressing,

what Barnouw (1978, p. 123) labels the "satrapies" that serve only to hide the real shaping forces in broadcasting. Policy does make a difference. Policy's relation to events, however, does not resemble the social engineer's fantasy of a blueprint come to life; today's cable television cannot be said to resemble the euphoric picture painted by the policy makers of a decade and a half ago. My claim is that the difference policy makes is peculiar and refracted; policy discourse serves to shape an institution that it fails to describe. In what follows, I present an overview of the discourse, an analysis of its structure, a discussion of its origins and development, and a discussion of some of its effects.

TALK OF NEW TECHNOLOGIES

Cable began around 1950 as CATV, a service providing improved television signal reception in remote areas. Over the years, CATV helped fill in the gaps in the ragged periphery of a system dominated at the center by the three television networks that distributed their signals nationwide via coaxial cable and microwave relay to broadcast transmitters in local communities. One of the grand paradoxes of American broadcast regulation is that it rests on the fiction that local broadcasters control the system. Consequently, the Federal Communications Commission can directly regulate only local transmitters, not the more powerful network organizations; local broadcasters thus are subject to a great deal of attention and regulatory tinkering. When the tiny but growing CATV industry set off a squabble in the broadcast system's periphery by threatening the profits of small local broadcasters, the broadcasters used their importance with the FCC to generate a set of

regulations that effectively halted CATV's growth. By the mid-1960s, CATV thus was locked out of television's economic mother lode, the top 100 markets. CATV operators conducted a strident campaign to remove the restrictions but to no avail, largely because they had little support outside their own ranks. The struggle between CATV operators and local broadcasters, for the most part, was seen as a minor affair, of interest only to industry insiders—until the late 1960s, when the climate of opinion began to change.

A classic illustration of the new climate of opinion can be found in the 1969 congressional testimony of Irving B. Kahn, the president of the country's then-largest cable operator and a leading spokesman for CATV. His testimony that day invoked a predictable series of arguments for removing the regulatory restrictions on CATV—cable provided a needed service, did not threaten the broadcasters, had been mistreated by the FCC, and so on. All this was accompanied by a wealth of anecdotal evidence and some skillful rhetoric designed to portray cable as a misunderstood underdog. Kahn, in other words, was making the same arguments that CATV operators had been making to the FCC throughout the 1960s. He concluded his prepared remarks, however, with a new twist. "There is one thing," he argued, "that cannot be ignored. And that is the great and growing body of competent, impartial opinion—from scientists, writers and journalists, members of the Government, businessmen, economists, and others—that stresses the great potential of CATV if it is permitted to test its wings in an open, competitive, climate" (cited in U.S. House of Representatives, 1971, p. 44). From Kahn's perspective, his appeal to expert authority was, perhaps, just one more rhetorical device. But

it would not have been an effective one a few years earlier. His reference to a "great and growing body of competent, impartial opinion" only made sense because of the recent rise of a new pattern of speaking about cable in the regulatory arena, the discourse of the new technologies.

In what Le Duc (1973, p. 5) described as "an ever expanding chorus of expert opinion," the new, hopeful view of cable television echoed throughout the policy arena in the late 1960s and early 1970s, appearing in numerous scholarly articles, studies, hearings, and journalistic publications. An important galvanizing force in this development was the Rand Corporation, which began research on cable television issues in 1969, with support from, among others, the Ford Foundation. Rand published more than a dozen reports on the topic over the next three years. The Alfred P. Sloan Foundation established the Commission on Cable Communications in the spring of 1970, which commissioned over 15 studies and produced a book length report (Sloan Foundation, 1971, p. vii). The fever went beyond the foundations, however. Articles appeared in *The New York Times* and *The Saturday Review*. The influential British weekly, *The Economist*, became a regular advocate of the new vision. A major article appeared in *The Nation* in the Spring of 1970, later to be published in expanded form as a book called *The Wired Nation*. Numerous progressive groups such as the ADA (Americans for Democratic Action) and the ACLU (American Civil Liberties Union) became interested in and began making contributions to cable policy proceedings. While there are important differences in many of these texts, they all share a sense of urgency, a sense of activism, and a sense of working against stifling and powerful conservative forces.

Cable had captured the imagination, not just of those traditionally concerned with television but of what seemed to be an entire cross section of the U.S. policy-making community.

Irving Kahn's confident reference to the existence of a "great and growing body of competent, impartial opinion" was not based on any explicit, thoroughly worked-out theory that can be located in a single statement or document. Rather, instances of the discourse typically were invoked in passing, as introductory or concluding passages to otherwise more concrete and specific arguments, policy recommendations, and research reports. For example, in 1968 the Advisory Task Force on CATV and Telecommunications for the City of New York published a report that was, for the most part, relatively brief and pragmatic. It recommended the introduction of state-of-the-art cable systems for each borough of the city, with rates and programming regulated, but not absolutely determined, by guidelines established by the city council. Most of its 50 pages referred to the specific details of the situation in New York. But the report concluded with the following passage:

In conclusion the promise of cable television remains a glittering one. . . . Those who own these electronic circuits will one day be the ones who will bring to the public much of its entertainment and news and information, and will supply the communications link for much of the city's banking, merchandising, and other commercial activities. With a proper master plan these conduits can at the same time be made to serve the City's social, cultural, and educational needs. (New York City, 1968, pp. v-vi)

It was this kind of passage that filtered most widely into policy discourse at large, not the report's data, analyses, and recommendations. The references to

next generation high capacity, two-way cable systems, to satellites, to systems that combined voice, computer, and television signals all on the same wire, to the generally "glittering" promise of this new dazzling technology—these were the particulars of the New York City report that found their way into discussions in the FCC, the Rand Corporation, and the elite popular press. Paradoxically, the specific details of the New York City report served largely as window dressing, while its vague speculations had a very concrete impact that went far beyond the borders of New York City. And this pattern was repeated in numerous other studies, books, and reports of the period.

THE DISCOURSE: THEMES AND GAPS

The discourse's general theme of technological revolution, of major change caused by technology, contained within it several interrelated subthemes. First of all, there was the subtheme of autonomous technology, of cable treated as if it were independent of social and economic forces. This pattern was evident in the shift—marked by the change from the word "CATV" to "cable"—from a description of the activity in question as a service to a description of the same activity as a technology. This sense of the essentially technological character of cable was fostered by two, in retrospect highly dubious, beliefs: the belief that the problems of television were themselves the product of a technologically determined lack of spectrum space and the belief that cable's high channel-carrying capacity marked a qualitative leap in technological development, one capable of solving the spectrum space problem. These subthemes together comprised an unconsidered synecdoche that worked to

obscure the larger, conflicted institutional conditions where the particular technology of coaxial cable was embedded. Finally, the entire process encouraged and was encouraged by a utopian subtheme that presented cable as embodying the potential for solving numerous social problems and dilemmas.

Frequently, the theme of technological revolution took the form of a claim that "[n]ew technology is transforming the realm of communication" (President's Task Force, 1968, p. 4). *The New York Times'* television columnist, for example, wrote in 1968 that "cable television, once known as community antenna television service," was associated with an "imminent upheaval in communications technology" and "augurs an era of revolutionary proportions now only dimly foreseen" (Gould, 1968, p. 95). Almost as frequently, it also was suggested that the revolution would embrace not just the realm of communications technology but all of society. A report filed with the FCC in 1969 stated that the "mushrooming growth in available information is bringing about a revolution in communications which will produce a profound change in the way society is structured and in the way we live" (Electronic Industries Association, 1969, p. 23; also cited in Le Duc, 1973, p. 37). Such statements promoted a revolutionary vision of technological progress in the field of telecommunications: the growing use of communications satellites, the increasing involvement of computers in data transmission, and the increasing capacity of broadband coaxial cable transmission techniques were not isolated developments or mere continuations in the technological evolution of communications systems but were all part of a revolutionary development comparable to that brought about by print, or by the industrial revolution.

Cable television was something that could have an important impact upon society, and it thus called for a response on the part of society. While society could respond, cable television itself was outside society, an autonomous entity that simply had appeared on the scene as the result of scientific and technical research. As Raymond Williams (1977) has shown, this assumption of autonomous technology is characteristic of much thought about television and society and constitutes a false abstraction of technologies out of their social and cultural context (pp. 10–14).

The terminological shift from CATV to cable that occurred during this period usefully indicates the discursive tendency to abstract complex issues into a simple, autonomous technology. The term “community antenna television,” still dominant in 1966, reflected an understanding of CATV as a service, an alternative method of program delivery. The service was made necessary not by purely technological factors but by a series of political and economic conditions, such as high economies of scale in television production and the FCC’s allocations of 1952, factors that in combination had left many parts of the country without adequate television coverage. The coaxial cables, signal amplifiers, and other bits of equipment used by the CATV operators were just variations on the technologies used throughout the television industry. Thus CATV generally was understood as simply an alternate route, a slightly different combination of wires and transmitters for delivering television signals. Through the mid-1960s “cable” was basically an insiders’ term, a colloquialism, and official language almost exclusively used “CATV” or “community antenna systems.”

By 1970 CATV had become cable, all references to service were dropped and

replaced by the name of a piece of hardware. By the early 1970s, magazine articles, FCC reports, Congressional hearings, and the like were peppered with references to cable.⁴

The treatment of cable as an autonomous, revolutionary, new technology with a life of its own is even more evident in larger discursive patterns. For example, the report of the influential Sloan Commission on Cable Communications, published in 1971, opens with this typical passage: “Spreading quietly into every corner of the United States—slowly and unevenly and yet with its own air of inevitability—is a new communications technology” (p. 1). Cable was new and revolutionary, the argument went, largely because of an increase in the maximum channel-carrying capacity of broadband cable technology. It was pointed out frequently that recent developments had expanded the carrying capacity of coaxial cable to 20 and more television channels, substantially more than could be carried over the air (given the existing allocations). Nicholas Johnson thus argued that comparing coaxial cable to a telephone wire was like “comparing Niagara Falls to a garden hose” (cited in Friendly, 1970, p. 58). This was particularly significant, it was said, because the broadcast system suffered from a lack of local outlets. The system, in other words, suffered from a clogged bottleneck on the local level, and the high channel capacity of broadband coaxial cable was a means to remove that obstacle.⁵

There are many gaps in this construction. In retrospect, one reasonably can argue that cable was neither new nor revolutionary nor best described as “cable.” Cable, after all, had been in existence since the late 1940s under the name of CATV. The increase in channel capacity, furthermore, was arguably

only evolutionary, not revolutionary. Why not speak of a cable revolution when the capacity more than doubled from three to eight in the 1950s, or from eight to twelve in the first half of the 1960s? And finally, why use the term "cable"? It is now widely accepted that the success of what we now call "cable television" was made possible, *not* by the technology of broadband cable but by the easy access to communications satellites that appeared in the mid-1970s (Taub, 1984, p. 17).⁶ Furthermore, *both* antennas and cables were necessary to the operation of *both* broadcast and community antenna television. Why draw so much attention to the different ways that individual television sets were linked to the broadcasting system—in one case radio waves, in the other, wires—when in *both* cases, the links to individual television sets were themselves connected to another set of links, the network webs? Questions such as these were brushed aside, however, and the shift from radio waves to wires on the local level came to stand for a transformation of the system itself.⁷

The larger point here is not simply that a technical mistake was made or that the evidence was not considered carefully. In the overall pattern of events, it becomes clear that careful consideration of such detailed arguments was obviously not the issue; the gaps and contradictions in the scenario of a cable television revolution easily were brushed aside by the force of the new discourse. A complex set of historical and economic circumstances was thoroughly obscured as CATV was abstracted in discourse into a simple new technology, something that was outside society.

Because of that abstraction, it became possible to speak of cable not as an embodiment of social contradictions and dilemmas but as a *solution* to them.

Cable came to be associated with the utopian vision of a "wired nation." Cable, it was frequently intoned, was the next step toward a "single, unified system of electronic communications" (Smith, 1972, p. 9). This theme had many variations: it was described also as the wired city scenario or associated with talk of a nationwide integrated telecommunications grid.

The utopian strain in the discourse is evident in frequent suggestions that problems of the present could be transcended with the help of new communications technologies, particularly insofar as they embodied the utopian dream of the wired nation. One of the key themes was a belief that telecommunications "can play a . . . fundamental role in achieving understanding and harmonizing conflict among modern societies dominated by diversity, mobility, and the claims of social justice" (President's Task Force, 1968, p. 5). The fragmentation and unrest of contemporary society, in other words, could be transcended by means of telecommunication systems. One major report argued for exploring "the constructive possibilities for the use of television to help overcome some of the problems of urban ghetto dwellers. Isolated rural people such as the inhabitants of Indian reservations could benefit from similar undertakings" (President's Task Force, 1968, p. 16). Central to this argument was an enthusiasm for the two-way or interactive potential of cable television. A 1972 statement of the chairman of General Instrument Corporation, for example, was typical: "Without two-way communications," he said, "CATV has a wonderful future; with it, its potential is very, very heady stuff indeed" ("Construction boom seen," 1972, p. 58). Le Duc (1973) similarly suggested that cable television could satisfy the complaints about the lack of broadcast

objectivity and bring an end to the attacks of community groups on broadcast licensees that were occurring at the time. On a broader level, he argued, in a cabled society,

members of the audience would no longer be simply the passive recipients of mass communications messages but would participate actively in their selection and dissemination. . . . Thus, direct feedback could well result in the reversal of the traditional roles of mass communications, making the communicator little more than a common carrier in a communications process controlled by each individual subscriber. In such a humanized atmosphere broad governmental control may no longer be necessary, except perhaps for the type of supervision of rates and service exercised over other private communications carriers. (pp. 14-16)

Cable, in other words, had the potential to rehumanize a dehumanized society, to eliminate the existing bureaucratic restrictions of government regulation common to the industrial world, and to empower the currently powerless public. Thus, on the level of discourse, not only were the historic complexities and dilemmas of the situation sublimated away into the abstraction of technology, but that abstraction in turn came to be represented as the solution to those dilemmas.

ORIGINS OF THE DISCOURSE

At first glance, the enthusiasm for the discourse of the new technologies seemed to spring from a cross section of the political spectrum. It was not, however, a true cross section. While on its fringes this group may have bled off in either direction, at its core, it encompassed neither the openly revolutionary parts of the then-active New Left nor the mainstream of the Republican Party. Maddox's list is telling: "organizations of

blacks, of consumers and of educational broadcasters, by the Rand Corporation, the Ford Foundation, the American Civil Liberties Union, the electronics industry, the Americans for Democratic Action, [and] the government of New York City." This was a New Deal coalition, made up of professional groups, corporations and their intellectual allies, and progressive political groups seeking ways to foster social change by working "within the system." It is possible to locate five key centers of enthusiasm for the discourse of the new technologies: the cable operators themselves, a group of economists concerned with regulatory problems, liberal elites interested in fostering alternatives to the existing commercial television system, a group of influential policy makers centered around Eugene Rostow interested in centralizing the management of the telecommunications system within a government agency, and a collection of progressives interested in fostering more democratic forms of communication.

Cable Operators: Discourse as Competitive Strategy

In a 1966 conference on CATV, the overriding concern was the struggle between broadcast station owners and CATV operators. The struggle was heated and involved some bitter regulatory debates being carried on both in Congress and the FCC, but it was basically a struggle between two industry groups and something of little or no interest to anyone but insiders. Most of the conference presentations were simple reiterations or variations on the same arguments that had been made by either side since the beginning of the struggle in the 1950s: community antenna television should be supported because it provides a useful public service, or it should be

restricted because it harms the public interest by threatening the well-being of local broadcasters. But then Richard Moore, the president of a major CATV company, gave a short speech that may represent an embryonic application of the discourse of the new technologies to CATV. "In assessing CATV and Pay TV," Moore (1966) said,

I certainly think it behooves us to look a little further ahead than just some sort of the short range things we think about immediately. I think we should look down the road—and as a guide to that trip—there is no one better than General David Sarnoff. I want to read a portion of his remarks which he made last December: "With the introduction of microwave channels, communication and high capacity cables, there is no longer any distinction among the various forms of communications. . . . This means that the major channel of information, of news, entertainment [sic] in the home will be a single integrated system that combines all of the electronic instruments and printed means of communication today: TV, radio, news, magazines, and books. . . ." Note that General Sarnoff did not say that unified communication of electronic pulses will stem from broadcasting, nor did he mention microwave communications, but he did mention high capacity cable. . . . When this single communication system does come—as it surely will—it may embrace cable, it may embrace Pay TV, it may embrace newspapers. Who is in a better position—who has the momentum, standing and know-how—than the broadcasters? So the message is—come on in, the water's fine! (sec. xii, pp. 2-3)

The last two sentences presumably are intended to suggest that the cable operators are in a better position than the broadcasters to take advantage of these new possibilities. In any case, Moore's general motivations here are clear. As the president of a relatively large CATV company, he is suggesting an alternate method for expanding cable's territory

and profits. By describing their businesses not as a mere ancillary community service but as new technology, the cable operators might gain new leverage against their commercial opposition, the broadcasters. The discourse of the new technologies might help raise their profits.

One driving force behind the discursive shift, therefore, was probably its appeal as a strategy in the small-market television battle between cable operators and broadcasters, particularly as that struggle was carried out through the FCC. By the early 1970s, when the discourse would reach a fevered pitch, it was familiar enough to the industry to have earned a label in the trade jargon: the "blue sky scenario."

The invocation of the discourse by cable operators is not enough to account for the intensity and pervasiveness that came to characterize talk about the wired nation by the early 1970s. The glib, pragmatic style characteristic of business people and the trade press that serves them, moreover, does not lend itself to the abstract flights of social prediction characteristic of the discourse. The blue sky scenario, as it appeared in the trade press, usually seemed to have a slightly sarcastic inflection to it and, in any case, seemed more to connote astounding profits than astounding social transformations. Whether CATV or cable, the basic point was to make money. The cable operators, therefore, may have set the ball rolling, but the impulses that really gave the discursive transformation its decisive momentum had to come from somewhere else.

Seeking Alternatives: Economists and Liberal Elites

The various streams of thought that fed the discourse shared a unique trait:

they interpreted the strains, struggles, and problems of the existing American television system to be the product, not of growing pains, but of fundamental structural flaws. In several different elite circles, television was no longer seen as an infant institution, and its flaws were no longer interpreted as temporary foibles, amenable to correction within the existing overall structure. People in positions of authority and power were beginning to seek solutions to television's failings, not in adjustments to the existing system but in alternatives to the system itself.

One of these calls for an alternative came from the liberal elite groups that sponsored the Carnegie Commission on Educational Television. While the Carnegie Commission did not address the issue of CATV or invoke the discourse of the new technologies in any direct way, it did help introduce into policy discourse the idea of considering a fundamentally different kind of television, structured in a radically different way and conceived at the national level. "No system," argued the Commission (1967),

exists to serve us as a model, and hence we have been obliged to develop a suitable new arrangement to bring this kind of television to the country. . . . [T]his is a proposal not for small adjustments or patchwork changes, but for a comprehensive system that will ultimately bring Public Television to all the people of the United States: a system that in its totality will become a new and fundamental institution in American culture. . . . This institution is different from any now in existence. (p. 75)

The important contribution of the Carnegie Commission to the discourse, was a shift in emphasis from "small adjustments and patchwork changes" to the creation of "a comprehensive system" through relatively radical restructuring.

At roughly the same time, another call for alternatives appeared in a very different environment. Several economists argued on economic grounds that the existing television structure prohibited diversity. A different structure, they went on to say, might eliminate what they saw to be the unnatural restrictions on economic competition and program diversity created by the existing system. Probably the earliest comprehensive published example of this argument, titled "A Proposal for Wired City Television" by Barnett and Greenberg, appeared in the winter of 1968, but, as the authors suggest, the argument had been current previously among members of the Rand Corporation, certain FCC commissioners, and others of the policy-making elite (Barnett & Greenberg, 1971, p. 217). The article takes as given the inadequacies of the existing television system such as lack of diversity. The reason for the inadequacy was that, "there are too few television signals being delivered to homes. . . . If more channels were available and the expense for transmitting and network connection of programs were less, and correspondingly more dollars were available for creating programs, then the number of programs and their diversity and range would be greater" (pp. 217-218). The solution to this channel bottleneck, the article went on to say, was "wired city television," WCTV for short, a system of television signal distribution based on high capacity wires instead of radio transmission. Many of the details of the article's argument are questionable: the article itself admits that spectrum allocation was only one restraint among many on the production of more diverse programming, for example, and its claim that cable would be substantially cheaper than radio transmission was based on some tricky arithmetic that

neglected the capital already invested in existing VHF and UHF equipment. The proposal for WCTV, furthermore, presupposed a dramatic, nationally coordinated radical restructuring of television based on a common carrier model and on the eventual elimination of over-the-air television—neither of which was politically a likely event. But the details, the logic, and the specifics of the proposal were not heavily debated and were not really that important in the discursive environment of the day. What was important was, first, the open, official acknowledgment of the feeling that television was somehow chronically limited and, second, the proposal of a technological means for alleviating that restriction.

The Carnegie Commission report and "A Proposal for Wired City Television" are published instances of discursive currents that were shared by many of those working in the policy establishment. (The former is cited in the latter as a promising, but incomplete, solution to American television's problems.) The Carnegie report was unconcerned with technology and communications grids, but it did express officially a broad dissatisfaction with the commercial basis and program content of television, and it suggested both the desirability and possibility of a fundamentally different alternative to the existing system. "A Proposal for Wired City Television" not only expressed dissatisfaction and suggested fundamental restructuring, but it argued that the problem—and its solution—were technological: limited spectrum space the problem and wires the solution. This view of the problem and its solution, of course, was to become a key feature of the application of the discourse of the new technologies to cable television. But the discourse was not yet full-blown. The wired city proposal lacked the sweeping generalizations, the

mythic vision that was soon to be attached to its as yet rather arcane economic and technological arguments.

The Flowering of the Discourse: The Rostow Report

In May of 1969, less than six months after "A Proposal for Wired City Television" was published, one of its coauthors, Harold Barnett, testified before a House subcommittee. Barnett, after arguing in favor of CATV, said: "Far more exciting than the actual accomplishments of infant CATV is the promise and potential of the wired city and Nation. The promise has significance of the order of magnitude of the Nation's two, already existing wire grids—telephone and electricity—or of the automobile highway grid" (cited in U.S. House of Representatives, 1971, p. 211). Barnett had added a new element to his discourse. He argued, not just for a wired city—a relatively specific alternative to local broadcast transmitters—but for a wired nation. His proposal had been elevated from a relatively concrete and technical argument to a visionary one.

Barnett was just following in the footsteps of others who had testified at the same hearings, most notably, Eugene Rostow, and of many of his colleagues in the policy-making community. The disparate streams of thought fed by the CATV operators, economists like Barnett, and by the liberal groups who had created the Carnegie Commission were all coming together in a complex unity. The repeated incantations of the wired nation vision, coupled to vague but grand gestures towards a portentous future, were fusing the mixed bag of interests, visions, and concepts behind cable in such a way as to give the impression of "a rising chorus of expert opinion."

In this context, a series of seminal blue

ribbon reports began to surface, which crystallized the discourse of the new technologies, giving it a level of legitimacy and respectability rare in broadcast policy debates. One of these was the previously mentioned New York City report. Another, conducted more or less contemporaneously, was the report of the President's Task Force on Communications Policy headed by Eugene Rostow. This report was global in ambition and voluminous in output. The basic theses of the report were: first, the various technologies of telecommunications together constituted a world-wide integrated system of awe-inspiring strategic and social importance; second, increasing this integration was a desirable goal; and third, this increased integration demanded an enhanced role for government. A central concern of the study was the maturation of communications satellites as devices of strategic international importance for both business and the military. The report's belief in the importance of coordinating efforts in this area led to its most influential proposal: the report recommended that a new, centralized government agency be established to advise the President and to coordinate activities of strategic military and economic importance in telecommunications.⁸

The study also showed a keen concern for CATV or, as the report was already referring to it, cable television. Cable television, according to the report, was an excellent site for exactly the kind of "technological and business developments plus regulatory policy" that the report advocated for the communications industry overall (President's Task Force, 1968, p. 183). The argument advanced by the report was essentially identical to Barnett and Greenberg's: the problems of television—lack of diversity, network dominance, lack of socially responsible

programming—could be resolved by the high channel capacity of cable television technology, which would overcome the bottleneck supposedly inherent in over-the-air television. The report went beyond Barnett and Greenberg in a few areas. It vaguely but enthusiastically suggested that cable television, by allowing minorities and disaffected groups an outlet to express themselves and to communicate with the nation, might reduce their feelings of alienation from American society and thus help solve the problem of the social unrest that was sweeping American society in 1968, particularly the unrest in black ghettos. The report also took one of the gaps in Barnett and Greenberg's proposal, the political unfeasibility of the proposed sweeping, coordinated changes, and turned that gap into a further justification for the "strengthened regulatory capability" that was central to the report's vision. Both the value and promise of cable, in a sense, lay in an enhanced and rationalized role of government as a coordinator that, it was hoped, would accompany the introduction of cable as a nationwide medium.

Only one chapter of the task force's final report, it should be mentioned, focused on television. That one chapter may have had important strategic value for the report's authors. The lackluster concerns about things like communications grids and the economic health of the American telecommunications industry might have gotten less attention had they not been associated with the publicly visible, but economically fairly unimportant, realm of television. Rostow's appearance before the House subcommittee hearings on CATV in 1969, in fact, may have been a strategic move for the sake of his macro-economic concerns.⁹ His appearance at the hearings, in turn, may be just one instance of a

general pattern that permeated the policy-making process throughout the late 1960s and early 1970s. Cable television gave weight to the technocratic concerns of the telecommunications industries and the corporate system in general; the association with major industrial developments, in turn, gave added weight to the concerns of a variety of forces in television, ranging from humanistic public broadcasting enthusiasts to CATV operators.

The Progressive Groups

The progressive spirit of many of those who gave voice to the discourse of the new technologies emerges in close readings of some key texts of the era. While introductory paragraphs and chapters often exemplified the discourse of the new technologies, long passages often were devoted also to cautionary warnings about the coming new media. Cable television offers vast potential for social good, the message seemed to be, but that potential will be realized only if we act now. These were not mere apologists for special business interests, nor were they blind enthusiasts of technology. They were groups that, for various reasons, wanted to work to accomplish democratic social change within the framework of the dominant power structures of society. The new interest in cable television seemed to provide a grand opportunity for such change.

Ralph Lee Smith's *The Wired Nation* (1972) is the most important example of this pattern. Originally published in the liberal magazine *The Nation*, Smith's tract, while full of glowing rhetoric about cable's promise, was also a polemic for certain political goals. Smith warned against economic concentration, cross ownership, and local monopolies in the

cable industry. He foresaw the possibility of mediocre, network-style programming patterns being repeated, instead of the diverse and community-oriented programming he desired. He warned against the narrow and purely economic industry interests that already were beginning to define the structure of cable television (pp. 90-94). These negative possibilities, however, did not dampen his enthusiasm. Instead, they led to his call for a combination of grass-roots community action, strict legislation separating cable operators, equipment manufacturers, and program suppliers, and a state-controlled, common carrier structure that would limit rates and prohibit cable operators from controlling program content.

Smith's sentiments were shared by other liberal groups such as the Americans for Democratic Action and the American Civil Liberties Union. The arguments of the ADA in favor of congressional intervention in cable television are illustrative. The ADA saw the cable issue as an opportunity for us "to regain our constitutional heritage of freedoms of communication" (U.S. House of Representatives, 1971, p. 388). "Already," the ADA complained,

the manipulation of technology by special economic interests, in the choice of Congressional initiatives, has abridged our communications freedoms. Tomorrow, unless we act today, our communications freedoms can disappear. . . . Our growth, urbanization, and industrialization have now substituted mass circulation, advertising-supported, print and electronic media for the community media of person-to-person speech, assembly, and print. Personal two-way dialogue has been supplanted by one-way "broadcasting" to mass "audiences." Active participation in communications has become passive reception. (U.S. House of Representatives, 1971, pp. 383-384)

The cable issue, for the ADA, was an opportunity to pursue social goals, not a chance to celebrate technology as a value in and of itself. And yet, the contribution of the ADA probably had effects quite different from those intended. The ADA's concrete legislative goals—a rewrite of the 1934 Communications Act that would foster a unified, national common carrier broadband network including television—never were given much serious attention. The ADA's voice in the debate, however, did lend weight to the overall momentum of the discourse.

The goals of the ADA, Ralph Lee Smith, the Rand Corporation, and Irving Kahn, were all quite distinct from one another. The question is, what motivated these diverse groups to respond at all? The cable industry's motivations were obvious, as were those of the electronics industry that stood to benefit from a growing cable industry. But the links among cable and many of the rest of the participants' interests were less obvious. Why was cable a challenge for so many rather than another new commercial enterprise? Why did the limitations in the situation generate passion in the progressive groups rather than pessimism?

The answer lies in part in the structure of the discourse itself. One of the most important themes in the discourse was that individual needs and differences could be transcended through a rational process of society-wide linking and coordination. The notion of a transcendent, utopian unification, coupled to the strategic ambiguities about politics and economics, resulted in a Janus-faced discursive structure, capable of being interpreted in several different ways while at the same time concealing those differences. Each group could read the discourse as embodying its own interest,

while at the same time ignoring the substantial differences between itself and the others who gave voice to the same language.

In spite of major differences in political and economic goals, taken together, the chorus of voices did create the impression of a unified religious faith. Few individual texts or voices produced the discourse of the new technologies in a pure form; few did not qualify it with their own particular concerns. The discourse, however, provided the ground where the different groups stood, the frame where their individual enunciations resonated and had an effect. Each group, in pursuing its own goals, sought strength in associating itself with the growing chorus in favor of change. The discourse thus served as a binding, unifying force.

The way that these various voices and the forces that motivated them merged in the policy arena can be understood partly in terms of mutual advantage. In the course of pleas for centralized planning of telecommunications systems, for example, Rostow's argument could be strengthened politically by suggesting that such planning might also serve such liberal humanist goals as aiding the cultural expression of minorities. Similarly, the liberal group's arguments were strengthened rhetorically by suggesting the compatibility of their goals with the political and economic goals of a strengthened telecommunications infrastructure. And, of course, the CATV operators were happy to ride shotgun to the whole affair and thus associate themselves with the rising chorus of non-broadcast voices that aided the operators in their struggles with the broadcasters. From the operators' perspective, the discourse's enthusiasts helpfully provided an intellectual, elite veneer to their self-interested activities.

Mutual advantage, however, is only part of the story. Krasnow and Longley's argument (1978) that policy processes can be understood in terms of the interactions between self-interested groups tends to reduce policy events to the functions they serve for policy participants.¹⁰ In the case of the discourse of the new technologies, this would obscure the extent to which the discourse itself, once set in motion, took on a life of its own. While it by no means eliminated the powers of the various interest groups involved, it did have its own specific conditions and effects. The discourse not only provided a site for the merger of forces through mutual advantage, it fueled that merger and, once in motion, turned around and transformed the forces that had given birth to it. The discourse, in sum, worked to refract the goals of many of those that originally contributed to it, leading to effects quite different than those envisioned.

The transformative action of the discourse is most evident in the case of the progressive groups. On the one hand, they were not blinded by the discourse in a simple way. The ADA, the ACLU, Fred Friendly, and Ralph Lee Smith, for example, were all quite aware of the narrow-minded commercial interests that were behind the current expansion of cable, of the many factors that could inhibit the desired rosy future of the new technology. To a large degree, it was precisely those factors to which these progressive liberals reacted. They hoped to fend off these negative possibilities by influencing cable television policy. The irony of the situation, however, was that it was in part their efforts that set loose the very commercial forces they were trying to resist; their enthusiastic participation in the policy proceedings lent a great deal of force to the general sense of

an expert, impartial opinion in favor of cable liberation.

EFFECTS OF THE DISCOURSE

The imprint of the discourse pervades the history of cable television. Perhaps it is most evident in the oft-repeated pattern of unjustified high hopes in the medium followed by disappointment that has marked the history of cable television; many have succumbed to the siren song of the discourse of the new technologies. In the early 1970s, for example, investors inspired by the talk about an imminent cable revolution turned cable into a glamour stock; huge investments were made, and stock prices climbed dramatically. The results were disastrous. When it became clear that the explosion in cable growth of the early 1970s would not happen, the bottom fell out of the cable market (Branscomb, 1975). Later in the decade, when the new satellite networks finally made possible a growth surge in cable, cable companies in search of franchises overpromised technology and services to municipal governments, and municipalities readily believed the operators' financially unrealistic promises in part because of the dramatic forecasts of cable's potential common to the discourse of the new technologies. And large amounts of money were invested and lost in elaborate high tech experiments informed by the discourse such as Warner-Amex's "two-way" system, QUBE.

Discussing the effects of a discourse inevitably raises sticky questions of causality. Discourse, as understood here, works at a structural level. It is not an isolatable factor whose effects can be established in a traditional, linear sense. Rather, it makes up the framework

where social events take place, where particular relations of cause and effect are made possible. If it were at all possible to ascertain the full effects of a discourse, it would require a broad historical analysis too involved to detail here.

It is possible, however, to locate some relatively isolated but influential changes that cannot be explained fully without reference to the discourse of the new technologies. The most important of these was probably the shift in the FCC's attitude towards CATV from one of restriction to one of encouragement; that shift was made possible in part by the reinscription of CATV in policy debate as a new technology, which in turn made possible the process that led to the Third Report and Order of 1972 and subsequent major changes in cable regulation. Without those changes, cable could not have become the major fixture of the American media system that it is today.

While the discourse of new technologies had flowered fully by 1971, it had yet to bear fruit in any concrete regulatory change. The regulations of the mid-1960s were still in place. The cable operators were still locked out of television's mother lode, the top 100 markets, and thus were confined to marginal status. The reconceptualization of CATV as cable associated with the discourse of the new technologies, however, had made it increasingly difficult to speak of cable as merely a marginal enterprise that concerned the FCC only insofar as it threatened local broadcasters. The discourse had given birth to a new common sense, a new set of taken-for-granted ideas about cable as an inevitable wave of the future, as a manifestation of the progress that was supposed to be the FCC's concern. The reconceptualization, combined with unrelenting pressure from lobbying cable operators and

their financial backers made it only a matter of time before new rules were drawn up. The conceptualization of CATV as simply a threat to struggling local broadcasters was no longer tenable.

While the watershed development in the FCC's reversal on the cable issue was the 1972 Third Report and Order, the FCC's change of heart was evident as early as 1970, when the FCC approved, by a vote of four to three, a proposal that if ultimately adopted would have ended the 1968 restrictions on major market cable systems (Le Duc, 1973, p. 191). The fourth vote that secured the passage of the 1970 proposal was supplied by Nicholas Johnson, whose about-face on the cable issue is telling. During 1970, Johnson, the outspoken consumer advocate on the commission, retreated from his support of the 1968 restrictions on cable's expansion into major markets and became a champion of the cause of "cable freedom" (Le Duc, 1973, p. 192). He was in many ways a classic liberal progressive: he had championed consumer groups, advocated grass-roots action for reform, and decried the television industry's lack of social responsibility or concern. He supported the 1968 restrictions on CATV probably because he believed that local broadcasters were already so beleaguered that they were hardly capable of serving the public interest; CATV, because it threatened the local broadcasters even more, represented yet another threat to the public service mandate.¹¹

By 1970, Johnson began to speak of cable with glowing hopes. In Senate testimony he revealed his new attitude toward cable. "Cable television," he said, is probably the number one communications policy issue this year. . . . [I]s cable the equiv-

alent of steam power in an age of sailing ships—an innovation that will prove to be a clearly superior technology for the job? . . . It is now possible to add the full range of New York and Los Angeles service, combined, to the local service available to, say, 90% of American homes. And, with businessmen currently installing 40, 50, and 60 channels in some cities, such service would still leave plenty of channels for a wealth of television services other than the conventional over the air programming fare. If a businessman is willing to provide the service, and a homeowner is willing to pay for it, there is no technological or economic reason why any American need be denied the television programming of any station in the world—let alone the United States. (U.S. Senate, 1971, pp. 92-93)

Cable offered what seemed to be a major outlet for Johnson's progressive hopes. Cable could increase citizen participation, allow repressed minorities cultural and political expression, and generally help lead society toward a more enlightened future.

The proposal of June 1970 never became policy, not the least because it would have been too cumbersome to administer (Le Duc, 1973, p. 192). But it did mark the reopening of the cable debate and pave the way for the new cable rules that appeared the following year. In March 1971, for the first time, the FCC held a series of public hearings on cable. While the statements and presentations made then have been called "remarkable for their lack of originality" (Le Duc, 1973, p. 193), their presence in formal proceedings before the FCC signified that cable had finally become a major entity in the broadcast policy arena. By this time there was no turning back. In June of the same year President Nixon created a cabinet committee on CATV, and when the FCC commissioners testified before the Senate Communications Subcommittee and the

House Communications and Power Subcommittee in June and July, cable television was given special emphasis. Chairman Burch promised both arms of Congress that he would produce a comprehensive proposal for cable regulation within two months. Burch kept his promise with the "letter of August 5, 1971" (FCC, 1971) which outlined a series of provisions that eventually were adopted without major modification in the "Third Report and Order on Docket 18397" in March of 1972. The pro-cable majority that had first made its appearance in the proposal of June 1970 had solidified: the letter was approved six to one.

While the discourse's major effect was the *passing* of the new rules for cable, the rules themselves bore the stamp of the discourse.¹² The visions of diversity through high channel capacity were reflected in the requirements that all new systems carry a minimum of 20 channels (then the technological maximum) and that all existing systems be upgraded to at least 20 channels by 1975. (These rules were later postponed.) Similarly, the progressive hopes for new forms of electronic democracy were reflected in requirements for public access channels and channels for municipal governments and educational institutions. In any case, the Third Report and Order of 1972 was a watershed development. For the first time, the FCC took concrete action based on the idea that cable ought to be encouraged to expand and develop.

The Third Report and Order alone, as it turned out, was not enough to ensure cable's success. Throughout the rest of the 1970s, the FCC and the courts entered a period that has come to be called "reregulation"; they frequently revised, relaxed, rescinded, and otherwise altered the set of regulations governing cable television. The details of the

history of cable regulation in the 1970s are complex and suggest a great deal of confusion and vacillation on the part of the FCC. While vacillations in the mid-1960s had the net effect of retarding cable's growth, the vacillations of the 1970s had the general effect of gradually bringing the regulatory structure into line with the economic needs of growing corporate ventures into cable. The FCC in the 1970s, in sum, finally did come to consider cable's development a reasonable goal of regulation. The logic governing the rule changes of the 1970s was one that classified the growth and expansion of cable as a natural and valuable element of progress.¹³ Cable's dramatic expansion, when it finally did occur, would not have been possible without that logic; that logic, in turn, would not have been adopted in Washington without the discourse of the new technologies.

Of course, other explanations for the FCC's policy shift on the cable issue have been advanced. None of these, however, can account fully for the FCC's reversal. One common explanation, for example, argues that when the change came, it may have been simply the product of a change in personnel on the FCC. (Le Duc raises, but then discounts, this possibility [1973, p. 190].) Commissioner Burch, the argument goes, assumed the chairmanship of the FCC in October 1969, with essentially no experience in broadcasting and formed his opinions in the new climate of opinion, untouched by the old. Kenneth Cox, the strongest and most vehement supporter of the cable restrictions, was slotted to retire in August 1970. Robert Wells, a Kansas broadcaster newly appointed to the commission, claimed neutrality on the CATV issue during his confirmation hearings in 1969. The old point of view seemed to be disappearing simply

through attrition. Yet personnel changes, Le Duc has demonstrated, were only a minor factor at best, because the 1970 proposal was approved two months before Cox retired (Le Duc, 1973, p. 191).

Most discussions of this era of cable policy have looked at events through the lens of the interest-group struggle model, which interprets policy as the product of government-mediated compromises between competing self-interested parties. It has been suggested, for example, that the 1970 proposal was passed because of the compromises it contained.¹⁴ Similarly, much attention has been focused on the intense negotiating conducted in the six months between Burch's letter and the Third Report and Order (e.g., Jassem, 1973). Discussion of this revival of the old struggle between the cable operators and the broadcasters particularly has concerned itself with the respective roles of the FCC and the White House's Office of Telecommunications Policy (OTP) as intermediaries in the dispute. Some attribute the compromise that emerged to the effectiveness of the OTP, especially of its head, Clay Whitehead (e.g., Sterling & Kittross, 1978, p. 424), while Le Duc (1973, p. 199) has argued instead that the OTP's role was largely symbolic and served instead as a "scapegoat [that] allowed negotiators to blame an omnipotent third party for a settlement all realized was ultimately necessary but which was too unpopular to risk without adequate justification."

None of these arguments can explain, however, why a compromise had become "ultimately necessary" in the first place, why a settlement allowing cable into the cities had come to be seen as inevitable. Why had the FCC, the OTP, the National Association of Broadcasters, and the National Cable Television Association all suddenly realized that a settle-

ment was necessary, when just a few years before, only a weak, relatively insignificant minority, the cable operators, had subscribed to such a view? And why had many important figures in the policy arena, such as Nicholas Johnson, begun to see cable in a completely new light? Compromises between self-interested groups are of course a way of life in Washington, but an analysis that focuses exclusively on this level falsely assumes that the framework for negotiation, the assumptions shared by all parties in a struggle, remains static. Clearly, somewhere around 1970, that framework changed, the basic set of shared assumptions was transformed. What was once controversial became a given of the regulatory process. One important structuring factor behind this transformation, the evidence suggests, was the discourse of the new technologies.

THE CABLE DISAPPOINTMENT

Few argue today that the existing cable television system has fulfilled all the promises of the wired-nation talk of the early 1970s. Arguments are frequently made, however, that the existing cable system has fulfilled certain aspects of the promises of 15 years ago, particularly the prediction that cable would end spectrum scarcity and provide truly diverse, competitive selection television services. For this reason, it is worth exploring the distance between the discourse and the existing institution of cable. The following section will focus merely on those aspects of the contemporary situation that illuminate the relation between the blue sky rhetoric of the late 1960s and present circumstances.

One of the central elements of the discourse was, and continues to be, the

promise of economic and content diversity through broadband cable delivery systems. Before discussing the limitations of this argument in detail, it is important to point out that the argument, in its typical form, involves a number of confused and inadequate assumptions. Varieties of this argument frequently collapse several distinct categories. Diversity of media content, diversity of media channels, and diversity of media ownership, it is often assumed, are essentially the same thing. A little reflection shows the weakness of this idea. For example, several channels under different ownership often find themselves competing for the same audience and thus imitating each other in their programming; a single business with several channels, on the other hand, is likely to program those channels differently in order to broaden its audience and avoid competing with itself. Ownership diversity and content diversity can sometimes vary inversely. Similarly, large numbers of channels do not correspond always to content diversity. The huge number of radio stations in the United States often is pointed to as a measure of the diversity of American radio. Yet American radio programming is remarkably homogeneous, being largely made up of a limited variety of music formats such as top 40 and country-and-western.

Even when the different kinds of media diversity are investigated separately, the contemporary cable system still falls short of projections. In the area of ownership diversity, it is still frequently argued that ownership diversity and economic competition have been, or will be, achieved through cable, now that the three broadcast networks' oligopolistic dominance of television has been broken by the entrance of numerous new program providers over cable. There undoubtedly has been an increase in

organizations delivering programming for the minority of homes that subscribe to cable. It is, however, not certain that this increase is best characterized as a shift from a noncompetitive situation to a competitive one; it might be more accurate to characterize it as an oligopoly situation dominated by five, six, or seven conglomerates replacing the previous oligopoly of the three networks. Perhaps this is an improvement, but it is clearly not the dramatic sort of improvement predicted by the discourse of the new technologies, and it is by no means certain that the new corporate players will behave in a manner substantially different from their broadcast predecessors.

Several levels of noncompetitive economic concentration in the cable television industry are evident. On the level of local cable systems, almost all systems are local monopolies regulated by municipalities.¹⁵ Furthermore, the typical pattern of ownership of cable systems involves multiple service operators (MSOs) that own numerous cable systems across the country, and there has been increasing concentration among MSOs in recent years. The high capital requirements of constructing systems, particularly in large urban areas, favors MSOs with very large financial backing. The result, according to an industry analyst, is that, "the handwriting is on the wall for the smaller companies, and I'm talking about some of the MSOs in the top ten. The big leagues right now are defined by the conglomerates in this business" (Hoffman cited in Bryant, 1984, pp. 16-17). Currently the top 10 cable companies already have 41% of all cable subscribers. Their control over the industry is expected to increase, in about five years, after the larger cities are wired and more capital is available for buyouts (Izzillo & Wolf, 1985, p. 37). The once-common cable system owned

by the small local businessman is now the exception to the rule.

On the level of program suppliers, concentration is also a clear trend. Because only a few of the numerous nationwide program suppliers have turned a profit yet, it seems unlikely that the current situation will remain as it is. According to one cable analyst, "practically everyone agrees that the number [of cable services this country can support] is far less than the number that exists today. Thus there's bound to be a shake-out" (Caranicas, 1983, p. 125). Even so, many of the strongest program suppliers are subsidiaries of the same company. For example, Viacom, Incorporated has full or controlling ownership of six of the most common cable services: MTV, VH-1, Showtime, The Movie Channel, Nickelodeon, and (with Hearst and ABC) Lifetime. Similarly, Time, Inc. owns HBO and Cinemax and shares USA Network with Paramount and RCA (Minot, 1985, pp. 78-79). (Not incidentally, both corporations also are involved heavily in cable system ownership, television production, and similar activities.) A pattern of constant cable channel mergers has come to characterize the industry. Group W's Satellite News Channel was folded into Turner's Cable News Network, RCA's Entertainment Channel was absorbed by Hearst and ABC's ARTS Channel to become The Arts and Entertainment Network, and Viacom merged its Cable Health Network with Hearst and ABC's Daytime to form Lifetime. Furthermore, some program operations, such as CBS Cable, have already gone on and off the air. The number of program suppliers, then, is becoming increasingly limited.

There have been worries that even within the shrinking group of suppliers, a few companies eventually will dominate the rest. The association of all major

program suppliers with major MSOs, for example, might restrict the likelihood of true competition emerging in the area of program supply; it stands to reason that the local system that is owned by a cable program service is likely to favor that program service over all others, which creates a further barrier to competition. The situation in cable might duplicate the oligopoly situation in broadcasting rather than alleviate it. The recent attempts by cable interests to take over broadcast networks—ABC by Capital Cities Communications, Incorporated and CBS by Ted Turner—give further weight to this speculation. The corporations involved in cable seem to be following in the broadcast networks' footsteps.

Even disregarding the issue of competition, the performance of cable in terms of content diversity arguably is equally disappointing. The overwhelming bulk of the programming available is programming that has been or would be available elsewhere: almost all of the old and new films that make up so much of cable's programming already have played in theaters, and much of the remaining programming consists of reruns of network television programs.¹⁶ Even the more original cable services, such as CNN or MTV, tend to program for the same mass audiences that the broadcast networks traditionally have sought. The unsurprising result is that minority tastes once again are underrepresented. The discourse's predictions of abundant, diverse programming for all have not been realized fully.

Economic and content diversity were only part of the promise of cable held out by the discourse of the new technologies. On a broader level, the discourse suggested that cable could empower the currently passive audience and eliminate the one-way nature of television. This

was to occur through two principle means: public access channels and two-way or interactive cable technologies that allowed the audience to communicate with programmers. Both of these areas have proved to be disappointing.

It can be argued that, even as originally conceived, the notion of interactive cable television was weak. For example, Raymond Williams (1977, pp. 139–140) has argued that, even where installed, the so-called interactive cable systems are more properly dubbed "reactive" systems; they only provide audience members an opportunity to respond to an extremely narrow range of choices established by the cable operator, not a chance to interact truly with either programmers or other audience members. Even ignoring this criticism, the experiments with two-way systems generally are acknowledged to have been failures. Two-way cable has garnered an enormous amount of media attention in the last 15 years, and yet there has been only one serious effort to develop it on anything but a purely experimental basis, that being Warner-Amex's QUBE, and even Warner-Amex finally has made a wholesale retreat from the idea of interactive television. In 1984, Warner, which served roughly two thirds of the 400 to 500 thousand homes wired for two-way cable, backed down on its promise of a two-way system for Milwaukee and abandoned its six-city QUBE network (Zahradnik, 1984, p. 24). Because the venture is acknowledged to have been a major financial drain on the company, no one is likely to take up the interactive project where Warner left off. An executive for American Telecommunications (ATC) reflected what seems to be the consensus of the industry when he said "[t]wo-way cable costs you more than it gets you, there's no question about that"

(Salmans, 1984, p. 22). Many franchise agreements have provided for the eventual installment of interactive systems, but in almost all renegotiation cases these provisions have been dropped.

Public access channels probably have not been as thoroughly disappointing as interactive systems, but no one seems willing to argue that they have been a success either. Original local programming in most areas has remained marginal, and one of the most frequent items for renegotiation is a decrease in the number of access channels offered. While attempts continue in many communities to make interesting use of existing access channels, the attempts continually suffer from lack of funding, inadequate equipment, and viewer apathy. Certainly, the dream of a cable system where "members of the audience would no longer be simply the passive recipients of mass communications messages but would participate actively in their selection and dissemination" is as much a fantasy now as it was in 1972.

The latest episode of cable's history can be said to have reached its climax with the passage of the Cable Communications Policy Act of 1984 (U.S. Senate, 1984). The act in effect finalizes and legitimates the corporate-centered institutional structure of cable television that evolved in the preceding decade. It contains much of both the positive content and the set of blind spots characteristic of the discourse of the new technologies. The hope that cable's multichannel capacity could serve to overcome the limitations of over-the-air television, for example, is reflected in the act's stated purpose of assuring that "cable communications provide and are encouraged to provide the widest possible diversity of information sources and services to the public"—a phrase that largely plays the role of the phrase "the public interest,

convenience, and necessity" in the original Communications Act.

CONCLUSION

At a minimum, the cable fable provides a cautionary tale about the dangers and blind spots of a discourse of autonomous technology and technological determinism. Beyond that, it also points to a series of systematic disjunctures in the policy process, in the intricate web of connections between the floodlit terrain of public debate and the massive institutions that produce and control the electronic media.

On the level of public debate, the cable fable is a story of repeated utopian high hopes followed by repeated disappointments. Cable was to be interactive; instead it is just as one way as its predecessors. Cable was to end television oligopoly; instead it merely has provided an arena for the formation of a new oligopoly. Cable was to cure social ills; instead it at best distracts from those ills.

On the level of the media industries, however, the pattern has been not a roller coaster of high hopes and disappointments but a process of gradual, if occasionally halting, growth and integration of cable into the American corporate system of electronic media and communications technologies. The back and forth motion between high hopes and disappointments has served the industry well; it loosened the regulatory framework at strategic moments, allowing cable to be ratcheted gradually into its place between the usually calcified, tightly joined elements of the corporate industrial system.

It is important to note that the industry that benefited from the policy debate did not simply manipulate the debate toward its own ends; it was not just a case of the public interest being over-

whelmed by the power of big business. Cable was brought into the regulatory fold in the early 1970s not simply because an industrial elite demanded it but because a coalition of groups, some with goals quite at odds with those of corporate management, cajoled the FCC into action through a collective public argument that coalesced around the discourse of the new technologies. The hopes for diversity, democracy, and cultural expression embodied in the discourse of the new technologies may have been naive, but they were rarely cynical; they were largely fueled by genuine social and political concerns.

Clearly, the policy debate nonetheless served the industry much more effectively than it did the social and democratic ambitions that helped generate the

debate. The cable fable's repeated pattern of high hopes followed by disappointments, therefore, points to a chronic frustration of the collective desire of the American body politic.

The cable fable finally might be described as a story of a social neurosis. Like a psychological neurosis, this social one fulfills a function for the patient—it serves as a management tool for our society's industrial system—but it does so in an ultimately painful, unsatisfying way. The repeated systematic disjunctures in the policy process of which the cable fable is a symptom, in sum, might best be understood as an encounter with the pains of our political neuroses, an encounter with the limits of collective action in our existing political and economic system. □

NOTES

¹I would like to thank Willard D. Rowland, Jr., Thomas Guback, Michael Curtin, Barry Orton, and the reviewers of *CSMC* for their helpful comments on drafts of this work. Parts of this study are derived from my doctoral dissertation, "Technocracy and Television: Discourse, Policy, Politics, and the Making of Cable Television" (University of Illinois at Urbana-Champaign, 1986).

²A pattern of talk that celebrates electrical technology as a harbinger of social harmony is not new. The discourse of the new technologies involving cable television in the late 1960s could be considered an example of what Carey and Quirk call "the rhetoric of the electrical sublime," a discourse that has resurfaced at regular intervals throughout American history (Carey & Quirk, 1970a, 1970b). I do not want to imply, however, that the discourse of the new technologies simply rose like a fog out of the waters of history and then enveloped the policy-making apparatus in an obfuscatory mist. The nature, origins, and effects of that discourse cannot be accounted for fully by simply describing it as an American "mythos," a recurring refrain in the conversation of American culture. Such an analysis risks idealizing the discourse, both because it fails to explain the reasons for the appearance and disappearance of the discourse over time in specific situations and because it risks ascribing an imaginary unity to the discourse, a completeness and coherence that the evidence suggests is not there.

³In a general way, I am using "discourse" to refer to systems of representation that order social life and provide a framework for comprehending social acts and events. Edelman (1964), who draws on Herbert Mead's theory of significant symbols, is an important precedent for this approach and has been applied to broadcast policy in Rowland (1983). More specifically, however, the term "discourse" has been popularized by the continental traditions of semiotics, structuralism, and post-structuralism. In particular, this study is influenced by Foucault (1972), for whom "discursive practices" are neither Meadian socially-constructed "frames" or "screens" for interpreting the world, nor surface manifestations of underlying "deep structures" but are contingent, complex localized systems of relationships whose exact nature and functioning can be specified only in concrete cases. Also important is the tradition of Marxist and non-Marxist critics who explore the ways particular ideologies or forms of understanding focus interest on certain issues while simultaneously obscuring others, thereby reinforcing oppressive social relations. Much of the work in this tradition has been criticized justifiably for too

often relying on vague generalizations and for being ahistorical. Rather than viewing policy as one more manifestation of a particular central tension or fundamental contradiction such as technocracy or the class struggle, the question of the ideological effect of policy discourse is treated as an empirical one. In this project the search thus has been for clear and specific links, or what Stuart Hall (1986), following Ernesto Laclau, calls "articulations," between discourse and institutional actions. For an elaboration of this view of policy, see Streeter (1986).

⁴The *Reader's Guide to Periodical Literature* of 1969 lists 8 articles under the subject heading "CATV," 2 with references in their title to "cable," 6 with references to "CATV." In 1970, there were 4 articles with titles referring to "CATV" and 3 with "cable." By 1971, the balance had reversed: only 5 article titles referred to "CATV," while 10 referred to "cable." It was not until the late 1970s that *Reader's Guide* reversed the priority of its subject headings, listing "see cable television" under CATV rather than the other way around. By that time, the vast majority of the articles listed under CATV referred to "cable."

⁵This is a dubious claim. The most telling evidence against the local bottleneck argument was the fact that in the late 1960s nearly two thirds of the allocated UHF broadcast frequencies across the country were left unused (a situation that continues to this day). At the time, Posner (1972) argued that, since broadcasting over the air costs roughly the same as "cablecasting," the unused UHF airspace suggested that the problem of broadcasting was that the market was thin, not that access was limited (pp. 102-103).

⁶The would-be satellite networks were forced to look toward cable systems to provide them with access to nationwide audiences more because of the lack of over-the-air outlets than because of the peculiarities of the technology of cable. Cable became the technology for the local delivery of those programs only by historical circumstance: it was the only locally based home signal delivery system that was begging for programming at the time.

⁷The practice of distributing television signals by wire grew up alongside television itself and has actually been central to what we call "broadcast" television all along. The lifeblood of American television, the network programs, were distributed on a coaxial cable network owned by AT&T in the 1950s, and coaxial cable is still used by AT&T for program distribution in local loops. Coaxial cable has been the unheralded linchpin behind the celebrated broadcast technologies of the network television system. In cable, the situation simply has been reversed: the new broadcast technology of satellite signal distribution has become the unheralded linchpin behind the celebrated new technology of coaxial cable.

⁸This recommendation eventually led to the creation of the White House Office of Telecommunications Policy.

⁹To the annoyance of Rostow and others, the Task Force's report and supporting studies, sponsored by the Johnson Administration, had been held back. President Nixon had not released them officially to the public when the hearings began. This refusal, it was thought, kept any of the study's recommendations from becoming policy. One of the reasons for Rostow's appearance at the hearings on CATV was apparently to secure the study's release. Halfway through the hearings, and after some bureaucratic maneuvering, at the request of the subcommittee chairman the White House agreed to release the full study. According to Chairman MacDonald, the White House action was facilitated by Rostow's appearance (U.S. House of Representatives, 1971, p. 71). By associating with the comparatively lively and publicly visible CATV hearings, Rostow was able to generate momentum for his less glamorous, but for him probably more substantial, ideas.

¹⁰Besides downplaying the substantial imbalances of power between competing groups and the exclusion of most of the public from the policy process altogether, Krasnow and Longley's reference to "self-interest" as an explanation for the complex political process can be misleading. Self-interest is not a self-evident fact of the social world; it is a highly metaphysical concept. Moreover, even where the term "interest" is useful to apply, it is never the case that interests are self-explanatory; interests are themselves structured. Finally, the application of this concept to policy may not be justified simply in terms of the evidence. Participants in the policy process have frequently *not* had their self-interest served, particularly over the long term. This is particularly true of progressive groups, but many businesses—such as the financial interests that lost money on cable in the early 1970s—also have lost money in their enthusiasm for policy procedures.

¹¹In June of 1968, Johnson supported the FCC's majority decision restricting distant signal importation, which was based on the notion that CATV expansion would discourage the creation of new local broadcast television stations. In 1969, however, Johnson spoke skeptically of this very argument (Johnson, 1969, p. 142).

¹²In exchange for access to the top markets, cable operators were presented with a maze of regulations. The most significant were the products of the FCC's role as arbitrator over local broadcast outlets' competitive struggles and involved restraints on what signals the operators could and could not carry—they had to carry three local network affiliates and three independents; they could not import programs that would preempt local programming, and so on.

¹³To mention just a few of the rule changes of the 1970s that illustrate the new logic: The maximum channel requirements proved difficult for many operators to achieve, and thus the rules were suspended to 1975, and in 1976 the date for compliance was postponed to 1986 (Shapiro, 1977, p. 12). Access requirements also were relaxed substantially in 1976, and the local origination requirements originally included in the regulations were dropped later for similar reasons. When it became clear that major market access was not enough, cable operators began to look for ways to attain nationally distributed programming as the route to success. In November 1975 the FCC adopted its regulations to this goal by abolishing its leapfrogging rules, thereby eliminating a major legal barrier to cable's ability to import inexpensive programming. This rule change made possible superstations, a concept that had just arisen in the cable industry. Satellites, it was recognized, were a likely method for distributing such programming. In the early 1970s, however, satellite downlinks were too expensive for the majority of cable operators, who were still small-scale operations. In December of 1976, the FCC decided to license earth stations as small as 4.5 meters, greatly reducing their cost, instantly bringing between 800 and 900 more systems within reach of the satellite program distributors such as HBO and Ted Turner.

¹⁴Commissioner Robert E. Lee's vote, it is said, was gained by appealing to his pet project of extending UHF coverage; the 1970 proposals asked that, in return for access to major markets, cable operators allow local UHF stations to insert their own commercials into programs imported on cable from other markets. Similarly, Commissioner H. Rex Lee, a staunch educational television enthusiast, may have supplied his vote because the proposal required a 5% tax on gross revenues from cable operators to be donated to the Corporation for Public Broadcasting.

¹⁵Some free market enthusiasts (e.g., Block, 1984) belatedly have acknowledged this situation and have launched a series of attacks on the franchising process, including a legal attack on the Cable Communications Act of 1984, on the grounds that municipal regulation constitutes an interference with the free market.

¹⁶Le Duc (1982) has argued recently that the success of cable is not due to original programming but to the build-up of a library of old films and programs large enough to make it inexpensive to fill a broadcast schedule with them.

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