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MEDIA

AND THE AMERICAN MIND

From Morse to McLuhan

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In the post-Civil War decades the Western Union Telegraph Company gained corporate hegemony in the telegraph industry. Its alliance with the AP, supreme in the field of news gathering, created a double-barreled monopoly that controlled the nation’s telegraph lines and franchised news. Public outcry against WU-AP collusion formed part of the broad antimonopoly sentiments central to late nineteenth-century radical and reform politics. Behind the various political proposals for telegraph reform lay a sense of a betrayal of the telegraph’s original promise to be the common carrier of intelligence. As they reviewed the institutional evolution of the telegraph, reformers felt a deep frustration over missed opportunities in the first years of telegraphy.

As early as 1838, Morse had wanted to sell his invention to the US government, fearing the consequences of uncontrolled speculation. He proposed a twofold plan whereby the federal government would obtain title to his patent and grant the right to individual
companies to build lines. The government would also build a telegraph network of its own, independent of private lines. Although Congress subsidized the first experimental line, it refused to buy Morse out, despite the recommendations of the House Ways and Means Committee (1845) and the postmaster general (1845, 1846). As a congressman in 1844 Cave Johnson had ridiculed Morse’s request for an appropriation, but as postmaster general two years later he changed this view. In 1846 he warned that “the evils which the community may suffer or the benefits which individuals may derive from the possession of such an instrument, under the control of private associations or unincorporated companies, not controlled by law, cannot be overestimated.” Johnson and others worried that the Post Office, given the exclusive power for the transmission of intelligence by the Constitution, would inevitably be superseded if the telegraph remained in private hands. Just as the Post Office had adopted other progressive means of communication and transportation, it ought to establish its own telegraph line, if not take it over totally. Thus the federal government, after initially encouraging the telegraph, lost its chance to own it and supervise its subsequent development.36

By the early 1850s the young telegraph industry found itself in an institutional chaos. Over fifty telegraph companies existed, some for no other reason than to sell stock. Duplicate lines went up all over, hurting the few firms that managed to turn a profit. The West in particular suffered from cheap and hastily built lines, unequal tariffs, and poor coordination of lines. Out of this confusion emerged Western Union, which grew into America’s first great industrial monopoly and its largest corporation in the space of ten years.

Western Union resulted from the consolidation in 1856 of two companies, the New York and Mississippi Valley Printing Telegraph Company and the Erie and Michigan Telegraph Company. The latter was controlled by Ezra Cornell, one of Morse’s earliest backers; he had obtained valuable grants under the Morse patent to build lines over a large stretch of the West. This patent right proved the key item in the deal, for it gave to Western Union the basis of its immense power. Ironically, the New York and Mississippi Company had originally been set up under the patent rights of the House printing telegraph; this was a rival to Morse’s system, which printed its messages in letters rather than in dots and dashes. But Morse’s machine was by far the simpler and more adaptable to use on railroad lines and Western Union’s exclusive contracts with western railroad companies helped give it a great advantage over its rivals in early years.

Through an aggressive policy of acquiring various telegraph properties and patents, rebuilding and consolidation, and signing exclusive railroad contracts, Western Union achieved supremacy in a decade. After 1866 the company consistently swallowed up virtually all competition (while simultaneously issuing new stock) until 1909, when Western Union itself came under control of a new corporate giant, American Telephone and Telegraph.37 Table 1 illustrates this growth.

**Table 1**

Western Union Development, 1856–1883

<table>
<thead>
<tr>
<th>Year</th>
<th>Miles of Line</th>
<th>Miles of Wire</th>
<th>Offices</th>
<th>Messages</th>
<th>Profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1856</td>
<td>550</td>
<td></td>
<td></td>
<td></td>
<td>$2,624,930</td>
</tr>
<tr>
<td>1867</td>
<td>46,270</td>
<td>85,291</td>
<td>2,565</td>
<td>5,879,282</td>
<td>2,506,920</td>
</tr>
<tr>
<td>1874</td>
<td>71,585</td>
<td>175,735</td>
<td>6,188</td>
<td>16,329,256</td>
<td>5,833,938</td>
</tr>
<tr>
<td>1880</td>
<td>85,645</td>
<td>233,534</td>
<td>9,077</td>
<td>29,215,509</td>
<td>7,660,349</td>
</tr>
<tr>
<td>1883</td>
<td>143,452</td>
<td>428,546</td>
<td>12,917</td>
<td>40,581,177</td>
<td>7,660,349</td>
</tr>
</tbody>
</table>

By 1880 the U.S. Census deemed it appropriate and desirable to compare the statistics of the nation’s telegraph system as a whole with those of Western Union, on account of “the transcendent importance” of that company (see Table 2).38

**Table 2**

Total U.S. Telegraph System Compared to Western Union, 1880

<table>
<thead>
<tr>
<th>Miles of Line</th>
<th>Total</th>
<th>Western Union</th>
<th>WU%</th>
</tr>
</thead>
<tbody>
<tr>
<td>110,727</td>
<td>85,645</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>291,213</td>
<td>233,534</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>31,703,181</td>
<td>29,215,509</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>3,154,398</td>
<td>3,000,000</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>$13,512,116</td>
<td>$12,000,000</td>
<td>89</td>
<td></td>
</tr>
</tbody>
</table>

While Western Union built a monopoly in the telegraph industry, it also aided the establishment of a news monopoly through mutual benefit contracts with the AP. Before the ascendancy of Western
Union, relations between AP and telegraph companies wavered between cozy encouragement and fierce rivalry. Prior to 1866 the AP held the upper hand in the relationship by favoring one telegraph company over another and by threatening to finance new lines. In 1853, for example, the failing Commercial Telegraph Company offered its lines between New York and Boston to the AP for forty thousand dollars. The association declined to buy the lines outright, but agreed to send all reports over the line as an incentive for other investors to purchase and manage it. In order to maintain regular, unbroken service between major news centers, the AP frequently encouraged additional construction, repairs, and changes in ownership.

Some thirty years later, Daniel H. Craig, general agent of AP between 1851 and 1866, lamented the refusal of New York's seven AP members to buy up telegraph lines. "Had they assented to my wishes," he argued, "the Western Union Telegraph Company would have been buried in its infancy, or if permitted to live, it would have been as the tail to the Associated Press kite, instead of the association's being in that relation to the Western Union Company, as it is, and has been for the last sixteen years."

Associated Press had to beat down at least one organized and well-financed attempt to make a telegraph company collector and distributor of the news rather than the mere agent of transmission. In 1859 the American Telegraph Company, then one of the most powerful systems in the country, with key lines between Nova Scotia and New York, threatened AP with rate hikes and cancellation of its policy of priority for all AP messages. The ploy failed only after a bitter public relations war and the reorganization of American Telegraph. In the aftermath, the Newfoundland to Boston line, which carried the latest foreign news, was leased to the AP.

As the first telegraphic news agency, the New York Associated Press gained the advantage over any opposition that might arise. When new cities were linked up to the telegraph system, the AP made their daily papers customers for the news dispatches. By 1860, the seven New York dailies comprising the AP spent over two hundred thousand dollars annually on news gathering, more than half of which they got back from customers outside the city. They were in total control of America's domestic and foreign news gathering, obtaining the news they wanted and settling all questions of policy.

In 1866 the New York AP faced its first major challenge from another news agency, but out of this conflict emerged a stronger AP in alliance with Western Union and a concept of news as a commercial franchise. The Western Associated Press had been founded in 1865 as a result of dissatisfaction with New York domination over news gathering. Western customers of New York AP wanted more news concerned with events in the West and Washington, D.C.; the New York papers emphasized news suited to the commercial interests of the city. The Western group also complained about the high cost of cable news from Europe. (The first permanently successful Atlantic cable began transmitting in 1866; New York AP members paid one-third of the cable costs, its customers the remaining two-thirds.)

An agreement reached in early 1867 outlined a division of territory with exchanges of news between the New York AP and the Western AP, plus certain payments to the New York group for foreign news and special services. In effect, this meant a federation of news gathering associations with mutual respect for each other's territorial monopoly. The New York AP still held the upper hand because it controlled European news, market reports, and Washington, D.C. dispatches. This truce paved the way for other auxiliary associations modeled on the Western AP, such as the New England AP, the Southern AP, and the New York State AP. These groups became something less than junior partners in the AP; membership in them was akin to holding a franchise, a privilege to be guarded and defended from outsiders.

Western Union played a critical role in forging peace and rationalizing the news gathering process. In 1866 Western Union also swallowed up its last two big rivals, the United States Telegraph Company and the American Telegraph Company, thus creating a corporation with a combined capital of over forty million dollars and virtual control of the nation's telegraph wires. Western Union feared that its system could not bear the strain of transmitting reports for two press associations, especially in areas where facilities were thin. Each of the three parties, New York AP, Western AP, and Western Union, signed contracts with the other two, thus formalizing and perpetuating the existence of three monopolies. Western AP's contract was regional, whereas the New York AP's and Western Union's were national. Both news associations pledged not to use the wires of companies other than Western Union and promised to oppose any new telegraph companies. Western Union agreed not to enter the news gathering field (except to sell market reports) and offered special discount rates to the two press associations.

Throughout the final decades of the century, attacks on the AP news monopoly and the Western Union telegraph monopoly rever-
involvement in the culture and communication seminar; its short-lived journal *Explorations* thoroughly immersed him in cultural anthropology. As a result, his work took a decisive turn toward the glorification of neoprimitivism and away from what he jeeringly began to call the "single point of view."

McLuhan borrowed from Innis the tools with which to extend an aesthetic doctrine into an all-encompassing theory of social change. Innis's historical and economic studies provided the intellectual legitimacy for McLuhan's grand leap from investigating the forms of transmitted messages to the forms of transmission themselves. Innis's extension of the analysis of economic staples to an exploration of communication forms and media biases paralleled the New Critical method that McLuhan absorbed at Cambridge: in a work of art the form is the content and the only valid criterion for judging a work. Or, as McLuhan wrote in an early piece on the relationship between economics and communication, "it is the formal characteristics of the medium, recurring in a variety of material situations, and not any particular 'message,' which constitutes the efficacy of its historical action."  

McLuhan declared in *The Gutenberg Galaxy* that Harold Innis was "the first person to hit upon the process of change as implicit in the forms of media technology. The present book is a footnote of explanation to his work." This was a rather disingenuous accolade, but it squared with McLuhan's overall simplification and mystification of Innis's accomplishments. McLuhan read Innis's contribution to communication studies as a purely methodological one, pursued by a man with no motivation save the desire to break out of the "single point of view" and into the realm of "insight." For McLuhan, the single point of view characteristic of Innis's traditional historical work (and of all print culture) was a severely limited way of *looking at* something. Insight, however, was the sudden awareness of a complex process of interaction, the technique of discovering by juxtaposing multiple aspects of a situation. McLuhan thus described the later Innis as inevitably adopting "a discontinuous style, an aphoristic, mental camera sort of procedure which was indispensable to his needs.... He juxtaposes one condensed observation with another, mounts one insight or image on another in quick succession to create a sense of the multiple relationships in process of undergoing rapid development from the impact of specific technological changes.... It is an ideogrammic prose, a complex mental cinema." Although this type of writing does appear in Innis, this passage is a more accurate account of McLuhan's own style. In McLuhan's paeans to Innis we catch a glimpse of his own self-image: "The later Innis had no position. He had become a roving mental eye, an intellectual radar screen on the alert for objective clues to the inner spirit or core of our times."

McLuhan chose to ignore Innis's political and moral position on communication, his Canadian nationalism, and his critique of American media. He preferred to view Innis as a poet or artist, but at the same time he condescendingly lamented Innis's deficiencies in the use of artistic analysis. He compared Innis's patterns of insights to symbolist poetry and modern painting. That is to say, in order to avoid the lineality of print and to present a dynamic model of history, Innis presented a rapid montagelike shot of events, a mosaic structure of insights. The primacy of aesthetic categories in McLuhan's thought forced him into this narrow reading of Innis. Once again, it is difficult not to see McLuhan's own wish fulfillment in operation here.

From 1953 to 1955 McLuhan chaired an ongoing interdisciplinary seminar on culture and communication at Toronto; the seminar was sponsored by the Ford Foundation. Along with anthropologist Edmund Carpenter, McLuhan started and edited *Explorations*, a lively quixotic journal designed to give seminar members an outlet. The purpose of this journal was to go beyond the literary concepts of media study, beyond the limitations of content analysis. Its basic premise held that changes in communication modified human sensibilities as well as human relations. Print technology, the basis of American educational and industrial establishments, was on the verge of being superseded by the electronic revolution in communication. By means of the journal, McLuhan and Carpenter hoped to develop an awareness of the role of print and literacy in shaping Western society and to investigate implications of the newer configurations of electronic media. Because literary and literacy biases were so deeply rooted, how could one step outside of them for objective explorations?

The answer in large part was a radical shift toward studies of the language and communication systems in primitive societies. In one article, Dorothy Lee analyzed the speech of Trobriand islanders. She argued that no past or present tenses and no causal or teleological relationships existed in their language. They did not perceive lineal order as a value. They avoided seeing patterns as connected lines; lineal connection (cause and effect) was not automatically made in
their language. Edmund Carpenter also found similar characteristics in the thought and speech of Aivilik Eskimos. In another article, Siegfried Giedion claimed that ancient cave paintings could not be understood from the space perspectives of today. These primitive artists saw things without any relation to the self. Their conception of space revealed the psychic realities confronting prehistoric man; their art does not seem rational to a twentieth-century individual because it lacks a sense of the horizontal and vertical.43

McLuhan and Carpenter postulated polarities between the sensory lives of preliterate and literate societies, between ear-oriented and eye-oriented cultures. In preliterate culture "acoustic space" prevailed; perception was keyed to the ear, but involved the simultaneous interplay of all senses. Tribal art served as a means of merging the individual and his environment, not as a means of training his perception of that environment. On the other hand, the "visual space" characteristic of literate man focused on the particular and abstracted it from a total situation; hence "seeing is believing." Both men held that the eye operates in isolation, perceiving a flat continuous world, and favoring one thing at a time. The transition from spoken word to writing and printing elevated the sense of sight to a paramount place, truncating one sense from the cluster of human senses. This detachment allowed great power over the environment by fragmenting fields of perception. But the alienation from all senses except sight also produced emotional detachment, a declining ability to feel, express, and experience emotions.44

During the Explorations period, McLuhan moved toward an explicit analogy between preliterate and postliterate cultures. New forms of electronic media seemed to have reversed the sensory fragmentation of visual space, thus foreshadowing a psychic return to the tribal situation. Like art forms, they magically transformed the environment around us. In 1955 he wrote: "The new media are not bridges between man and nature; they are nature... By surpassing writing, we have regained our Wholeness, not on a national or cultural, but cosmic plane. We have evoked a super-civilized sub-primitive man... We are back in acoustic space. We begin again to structure the primordial feelings and emotions from which 3000 years of literacy divorced us."45

McLuhan's mature theory rests on a new version of the Christian myth, enabling McLuhan to concentrate on elaborating a psychology...
priestly monopolies of knowledge and power and, by implication, the destruction of nonalphabetic cultures. "By the meaningless sign linked to the meaningless sound," McLuhan asserted, "we have built the shape and meaning of Western man."45

The invention of movable type completed the process of alienating man from his original tribal state of a participatory, "audile-tactile" way of life. "The invention of typography confirmed and extended the new visual stress of applied knowledge, providing the first repeatable commodity, the first assembly line, and the first mass production." As such, print differed markedly from the phonetic literacy expressed in written manuscripts. Compared to printed books, medieval manuscripts were of low definition; they were usually read out loud and thus required some interplay of the senses. The printed book mechanically intensified the effects of the phonetic alphabet, further fragmenting sensory life by heightening the visual bias. It made reading a more private and silent activity. The book's portability also contributed to a new cult of individualism. By turning the spoken language into a closed visual system, print created the uniform and centralizing conditions necessary for nationalism. When the assumptions of homogeneous repeatability were extended to other concerns of life, they "led gradually to all those forms of production and social organization from which the Western world derives many satisfactions and nearly all of its characteristic traits."46

The Gutenberg Galaxy is a great synthetic work, a tour de force of humanist scholarship. McLuhan's own contribution to it rested largely on his interpretations of Renaissance authors; he invariably reduced their works to sophisticated comments on the impact of print in their time. As artists, Shakespeare, Pope, Marlowe, Swift, Rabelais, and More were the only contemporaries capable of understanding the traumas brought on by the new print technology.

McLuhan saw the present age as a new Renaissance, a new sensory galaxy ushered in by electronic media that are capable of jolting our sensibilities as sharply as the printing press did earlier. The present is the "early part of an age for which the meaning of print culture is becoming as alien as the meaning of manuscript culture was to the eighteenth century." Ironically, America, which has the largest backlog of obsolete technology, now leads the transition into the electronic era. It thus suffers the most severe pains of conversion. "The new electric galaxy of events has already moved deeply into the Gutenberg galaxy. Even without collision, such coexistence of technologies and awareness brings trauma and tension to every living person. Our most ordinary and conventional attitudes seem suddenly twisted into gargoyles and grotesques. Familiar institutions and associations seem at times menacing and malignant."47

If The Gutenberg Galaxy stood as McLuhan's history of the disturbances ensuing from literacy and print, Understanding Media (1964) was his educational guide for easing the psychic conversion into the new age. In fact, the book first appeared as a mimeographed report, commissioned by the U.S. Office of Education, on how to teach the effects of media in secondary schools. It is the work that made McLuhan a household name and stirred the greatest controversy both in and outside of the schools. It is also his least substantial and most dated book. Its subtitle, "The Extensions of Man," reflects the increasing importance McLuhan placed on his psychology as well as on his role as a pioneering scientist.

According to McLuhan, the new electric technology is "organic and non-mechanical in tendency because it extends, not our eyes, but our central nervous systems as a planetary venture." He was by no means the first to employ the analogy between media and the central nervous system. While seeking a government subsidy for his research in electromagnetic telegraphy in 1838, Samuel Morse wrote in terms that uncannily presaged McLuhan. Six years before the completion of the first American telegraph line, Morse thought it not too visionary "to suppose that it would not be long ere the whole surface of this country would be channelled for those nerves which are to diffuse, with the speed of thought, a knowledge of all that is occurring throughout the land; making, in fact, one neighborhood of the whole country."48 But McLuhan elevated this metaphor into a psychological and biological principle at the center of a rigid technological determinism.

The effects of media technology occur not on the conscious level of opinion and concepts, but on the subliminal level of sense ratios and patterns of perception. His famous phrase, "the medium is the message," refers to the change in scale or pace or pattern that any extension of communications technology introduces into human affairs. Each extension, however, brings with it a numbness or narcotizing effect that blinds people to its real meaning. McLuhan claimed, "I am in the position of Louis Pasteur telling doctors that their greatest enemy was quite invisible, and quite unrecognized by them. Our conventional response to all media, namely that it is how they are used that counts, is the numb stance of the technological idiot. For the 'content' of a medium is like the juicy piece of meat carried by the burglar to distract the watchdog of the mind."49
McLuhan repeatedly referred to the "numbness," "trance," "subliminal state," "somnambulism," and "narcosis" induced by the new electronic media. He attached great significance to the Greek myth of Narcissus, just as Freud placed the myth of Oedipus at the center of his psychology. The "Narcissus narcosis" parallels Freudian repression, serving as self-protecting numbing or anesthetizing of the central nervous system.

The youth Narcissus mistook his own reflection in the water for another person. This extension of himself by mirror numbed his perception until he became the servo-mechanism of his own extended or repeated image. . . . Any invention or technology is an extension or self-amputation of our physical bodies, and such extensions also demand new ratios or new equilibriums among other organs and extensions of the body. . . . To behold, use, or perceive any extension of ourselves in technological form is necessarily to embrace it. To listen to radio or to read the printed page is to accept these extensions of ourselves into our own personal system and to undergo the "closure" or displacement that follows automatically. It is this continuous embrace of our technology in daily use that puts us in the Narcissus role of subliminal awareness and numbness in relation to these images of ourselves. By continually embracing technologies, we relate ourselves to them as servomechanisms. That is why we must, to use them at all, serve these objects, these extensions of ourselves, as gods or minor religions.50

McLuhan embraced a species of determinism that might be labeled technological naturalism. He argued that in his normal use of technology, man is perpetually physiologically modified by his own inventions. "Man becomes, as it were, the sex organs of the machine world, as the bee of the plant world, enabling it to fecundate and to evolve ever new forms. The machine world reciprocates man's love by expediting his wishes and desires, namely, in providing him with wealth."51 The new media are not bridges between man and nature; they are nature.

Technological naturalism is the ecological partner to McLuhan's psychology. That is to say, he identified the changes associated with the new media as environmental and invisible to people in the way that water must be invisible to fish. Hence McLuhan's insistence that he operated like a scientist, clinically detached for survival purposes: "One must begin by becoming extra-environmental, putting oneself beyond the battle in order to study and understand the configuration of forces. It's vital to adopt a position of arrogant superiority . . . without the detached involvement, I could never objectively observe media. . . . So I employ the greatest boon of literate culture: the power of man to act without reaction—the sort of specialization by dissociation that has been the driving motive force behind Western civilization." There is a great irony here. McLuhan announces that electronic media portend a return to the "seamless web of tribal kinship in which all members of the group existed in harmony," a richer and more passionate world than Gutenberg's. Yet he must fervently invoke the potent image of scientist, the ultimate product of literacy, in order to legitimize himself.52

There is a persistent strain as well between passive acceptance and the pragmatic urge to control. He argued that we are within conceivable range of a world automatically controlled to the point where we could say: "Six hours less radio in Indonesia next week or there will be a great falling off in literary attention.' Or 'We can program twenty more hours of TV in South Africa next week to cool down the tribal temperature raised by radio last week.' Whole cultures could now be programmed to keep their emotional climate stable in the same way that we have begun to know something about maintaining equilibrium in the commercial economies of the world." McLuhan simply tosses off objections to this monstrous vision as useless and distracting moralizing. "Computer technology can and doubtless will program entire environments to fulfill the social needs and sensory preferences of communities and nations. The content of that programming, however, depends on the nature of future societies—but that is in our own hands."53

Television is the crucial new communications medium in the retribalization process. It is a "cool" medium, by which McLuhan means that it has low definition and therefore demands greater participation on the part of its audience. Like other cool media, such as cartoons, hieroglyphics, and manuscripts, television requires the audience to complete the picture, to fill in the gaps. "Hot" media, such as photographs, prints, movies, and radio, extend one single sense in high definition, leaving little to be filled in. The television image is not a photo in the usual sense but a "ceaselessly forming contour of things limned by the scanning finger. The resulting plastic contour appears by light through, not light on, and the image so formed has the quality of sculpture and icon, rather than of picture. The TV image offers some three million dots per second to the receiver. From these he accepts only a few dozen each instant, from
which to make an image.” Although McLuhan is correct in noting the difference between electromagnetic and film images, his argument is certainly not scientific. There is no evidence for his hypothesis; it is difficult to see any difference between the automatic, filling in of the television picture and the “persistence of vision” phenomenon that makes motion pictures possible. Each of these occurs automatically, without conscious thought by the viewer. In addition, the quality of the television image has improved enormously over the past fifteen years with color and the new solid-state and cable systems.

McLuhan’s pseudoscientific description of television’s sensory impact centered on the supposed tactility of the image. “The TV image requires each instant that we ‘close’ the spaces in the mesh by a convulsive sensuous participation that is profoundly kinetic and tactile, because tactility is the interplay of the senses, rather than the isolated contact of skin and object.” For McLuhan, the sense of touch represented the sum of all human senses, the long lost sensus communis of the tribal man. Television is thus the practical means for recovering the shattered psychological unity in the modern world.54

In the last analysis, McLuhan offered us a trick of vision, not a true social theory. Either one sees it or one does not. Formerly, only the artist could accurately foresee and comprehend the violent psychic changes accompanying new media technology. Today, the instant speed of electric information permits easy recognition of the patterns of change. The transcendental leap is now possible for all. “If adjustment (economic, social, or personal) to information movement at electronic speed is quite impossible, we can always change our models and metaphors of organization, and escape into sheer understanding. Sequential analysis and adjustment natural to low speed information movement becomes irrelevant and useless even at telegraph speed. But as speed increases, the understanding in all kinds of structures and situations becomes relatively simple.”

McLuhan substituted mythology for history by ignoring or distorting the real historical and sociological factors that shaped media institutions. “It is instructive to follow the embryonic stages of any new [media] growth,” he wrote, “for during this period of development it is much misunderstood.”55 In his role as mythmaker, McLuhan argued deterministically that our media of communication had to evolve the way they did. His technological naturalism made media biological rather than social extensions of man. Although he purported to trace the cultural development of man through communications media, his history is curiously devoid of real people.

The obsession with his own image as a clinically detached scientist stemmed from his need to exploit the prestige enjoyed by scientific explanation in the modern era. Behind the flashy scientism, McLuhan actually transformed the history of communication into a seductive allegorical narrative, which preaches that we must first submit before we can be saved.

The plain fact that so much of McLuhan’s later works already seems dated reveals him as a distinctive phenomenon of the 1960s. He may very well be remembered more for his analyses of content than those of form, even though he has repudiated The Mechanical Bride as obsolete since television. The great attention given to the generation gap, youth revolt, and university protest in Understanding Media and the later picture books (The Medium is the Massage, Counterblasts) seems particularly naive today. His enormous popularity no doubt accounted for the ferocity of some of the attacks made upon him by the literary and university establishments; he reserved his greatest scorn in interviews for the traditional literary critics.

His vogue and the reaction to it clearly met a need. The sixties will be remembered, among other things, as the decade in which television came of age as the dominant medium of communication. Television had saturated America by 1960, with at least one set in virtually every home. Daily national network news arrived in 1963. McLuhan both reflected and encouraged the growth of media awareness in American society. He also identified correctly the extremely incestuous trend among the media themselves; an extraordinarily high percentage of media content consists of items concerning other media forms. Today, all entertainment, news, political events, and advertising coexist equally as multimedia affairs.

Along the way to his popular breakthrough, however, McLuhan smoothed out any of the critical edges he had exhibited in his thinking. He certainly abandoned the critical context that had been so crucial in the work of his alleged mentor, Harold Innis. Stripped from the public McLuhan were any Innisian vestiges of moral and political concern with American media imperialism, Canadian resistance, the power of advertising, or the growing hegemony of space over time bias in Western culture. In his focus on the primacy of forms of transmission, McLuhan borrowed freely from Innis; but with McLuhan, Innis’s despairing warnings about the direction of new communications technologies were transformed into a celebration of the “inevitable.”

McLuhan’s glorification of television slid very easily into an
apology for the corporate interests that controlled the medium. The McLuhan cult on Madison Avenue was very real in the sixties, as the advertising industry leaped to embrace a college professor who told ad men that they were creative artists. “People are looking all the time for an intellectual explanation of the work they are involved in,” wrote one advertising executive in 1966. “They have for many years . . . revolted from the idea that advertising was mysterious, a sort of ‘black art.’ They wanted to know why and how it worked. I think in many ways McLuhan has had more to say for us to solve these problems than anybody previously.” McLuhan’s frequent appearances on television helped turn him from knowledgeable sage into a mere pop idol grateful for the chance to glorify the medium giving him so much free exposure.

McLuhan’s corporate multimedia newsletter, Dew Line, as well as his various consulting deals with advertising and media conglomerates, made it hard to swallow his continual public stance that he personally abhorred the changes he described. Yet one need not accept his personal mythology or his ties with the corporate world to acknowledge his contribution to a general shift in perception in American culture.

McLuhan’s impact ought to be set in the context of the broader trend toward synchronic analyses of language, communication, myth, and expressive forms of all types. The post–World War II intellectual breakthroughs in structural anthropology, linguistics, and semiotics all had certain affinities with the New Critical literary tradition in which McLuhan had originally been trained. Indeed, McLuhan himself may be viewed as a “medium” who popularized these approaches by applying their techniques to the analysis of American media fare. He made these esoteric disciplines relevant to the public imagination; in the process, he greatly enlarged the range of “legitimate” areas for cultural study.

McLuhan’s penchant for exaggeration and outrage, for the pun and the probe, no doubt detracted from his status as a serious social theorist. The man who once appeared as a learned, obsessed, and even inspired prophet succeeded in getting just enough of his message across to be reduced to just another entertainer. His recent death made front-page news, putting him once again in the media spotlight from which he had receded. But the obituaries generally treated him as a quaint oddity from the mythological sixties, the quintessential product and creator of that media-haunted decade.

We may think of the post-McLuhan era as one characterized by a deeper and more sophisticated consciousness of the enormous role played by modern communication in everyday life. But the semantic ambiguities once associated with the word communication now seem to have regrouped around that increasingly opaque term, the media. Much of the discourse about the media, in learned journals as well as informal conversation, suffers from fuzziness, lack of clarity, and a jumble of definitions. Think, for example, of the ways in which the noun media finds growing expression as an adjective, as in “media event,” “media people,” or “media hype.”

Think, too, of the various usages of the noun form. The modern sense of the word dates, interestingly enough, from its use in advertising trade journals of the 1920s, as in the phrase “advertising media.” But today the term is used interchangeably with the press or the journalistic profession, especially in the sense of investigative reporting. At the same time, media is often used to distinguish nonprint forms of communication, such as film and broadcasting, from print. It may connote the larger realms of entertainment and show business. Denunciations of the media as too liberal, too permissive, too conservative, or too manipulative invoke the term as a moral or political category. Most everyone engages in damning the media for glorifying, exaggerating, or even causing some particularly odious feature of modern life.

Confusion of the singular and plural forms, medium and media, surely reflects a popular perception of the incestuous relations
among the various mass disseminators of words and images. Media content is remarkably reflexive; each medium is filled with material from and about other media. Over the past twenty years, a virtual fusion of the techniques, style, and subjects of entertainment programs and news programs has taken place. On the level of public awareness, this superheated reflexivity takes some curious forms. Television rating wars between the networks are now treated as hard news; film and broadcasting executives enjoy an exalted status as celebrities, cult figures, and creative auteurs in their own right.

The bourgeois commercial nexus at the center of the American film, broadcasting, and press industries clearly encourages this situation. It also promotes the media as a total, unchanging, "natural" part of modern life. Indeed, the everywhere-ness, all-at-once-ness, and never-ending-ness of the media are powerful barriers to understanding, or even acknowledging, their history.

The diverse meanings evoked by the term media represent a linguistic legacy of the contradictory elements embedded in the history of all modern means of communication. For each medium is a matrix of institutional development, popular responses, and cultural content that ought to be understood as a product of dialectical tensions, of opposing forces and tendencies clashing and evolving over time, with things continually giving rise to their opposite. Broadly speaking, these contradictions have been expressed in terms of the tension between the progressive or utopian possibilities offered by new communications technologies and their disposition as instruments of domination and exploitation.

One finds parallels or refractions of this dialectic in the thought of American communications theorists. Within the tradition as a whole, Harold Innis and the later McLuhan represent opposite poles. Charles H. Cooley and John Dewey shared affinities with McLuhan's more utopian outlook, although they started from quite different premises. The emphasis among the Frankfurt group on the media as primary agents for maintaining the dominant monopolies of knowledge and power echoed the profound pessimism of Innis, but from quite another political and cultural vantage point. To varying degrees, several individual thinkers, notably Robert Park, encompassed these tensions within their own work. And the career of Paul Lazarsfeld, key figure in the empirical and behavioral tradition, exemplified the intellectual dialectic, for the refugee who survived by juggling market research contracts also gave T. W. Adorno his first job in America.

What I would like to stress here is the need to recover the historical elements of an as yet uncompleted dialectic in order to further understand the present configuration of American media, to suggest avenues for future research, and to perhaps make sense of the upheaval currently being wrought by new cable, video, and satellite technologies. What follows is a historical sketch of some dialectical tensions in American media as viewed from the three related standpoints of early institutional developments, early popular responses, and the cultural history of media content. Examples are taken mainly from the three media whose histories have already been discussed: the telegraph, motion pictures, and radio.

If the schema presented below seems to have naively favored the utopian side of the dialectic, I can only point to the present dearth of knowledge. We need to redress an imbalance in our historical thinking, to recover a hidden side of media history. At the same time, I have suggested a few nodes on the grimmer side that might prove fertile territory for investigation, areas where the media operate as the excrescence of commercial capitalism.

Finally, I have offered some thoughts on how the historical perspective may help us gain some insight into the latest rash of technological breakthroughs. Here I am less interested in presenting a static, grand theory than in stimulating discussion and action concerning the new fields that are now opening up in three main areas: decentralized distribution networks, greater individual control of hardware, and opportunities for innovative programming.

Considered as an institution, each medium that evolved from the work of individual inventors and entrepreneurs was later subsumed into larger corporate or military contexts. The key roles played by small concerns and amateurs in the early history of new communications technologies are too often forgotten. Yet the importance of corporate and military settings for technological progress and of the accompanying support by large capital investments and highly organized research teams clearly intensifies the closer one gets to the present.

Samuel F. B. Morse's perfection of a practical electric telegraph was a lonely and poverty-stricken venture. For six years after the 1838 demonstrations of a workable instrument, Morse failed to obtain any government or corporate subsidy for his work. Congress finally authorized a thirty-thousand dollar appropriation to build the first telegraph line in 1844. However, in refusing Morse's offer to buy him out, Congress thwarted his wish that the government con-
trol future telegraph development. The ensuing twenty-five years of wildcat speculation and construction, both fiercely competitive and wasteful, finally ended with the triumph of Western Union, the first of several communications monopolies owned by private enterprise. In the case of motion pictures, one finds a larger group of individual inventors and small businessmen acting as prime catalysts for technological innovation. The variety of cameras and projectors used in the early years reflected the contributions of numerous inventors from around the world. In the early industry, capital investment as well as creative energy came largely from Jewish petit bourgeois immigrant exhibitors and distributors. They were eager to invest in the new business that was beneath the dignity of traditional sources of capital. With roots deep in the urban thicket of commercial amusements, motion pictures found their first audiences mainly in the ethnic and working-class districts of the large cities.

Each early attempt to standardize or license equipment, films, and distribution was undermined by successive waves of independents. The Motion Picture Patents Company, heavily capitalized and dominated by the Edison interests, looked invincible when formed in 1909, but it lasted only a few years. The Hollywood film colony, later the symbol of authority and rigid control, was originally founded by independents seeking to escape the grip of the patents company. The fluidity of the movie industry congealed after the introduction of sound in the late 1920s. "Talkies" helped solidify the hold of a few major studios as the technological complexity of sound production precluded the sort of independent activity characteristic of the early years.

Individual inventors and amateurs figured prominently in the first years of radio as well. Pioneers such as Marconi, De Forest, and Fessenden laid much of the foundation for wireless technology in small, personal research settings. The technological sophistication required for wireless telephony, as well as the needs of the military in World War I, encouraged more systematic and heavily financed research and development. Still, it is worth remembering that an important part of the strategy of large corporations such as A T & T and GE involved buying out and intimidating individual inventors, the most famous case being the notorious dealings of A T & T with Lee De Forest.

World War I had encouraged a boom in radio research, with close cooperation between A T & T, GE, Westinghouse, and the federal government, and it had led directly to the creation of RCA. But the emergence of broadcasting in 1920 came as a shock. Virtually no one had expected broadcasting, the sending of uncoded messages to a mass audience, to become the main use of wireless technology. By 1926 corporate infighting in the radio world resolved itself, leaving in its wake the basic structure of today's commercial television. A T & T agreed to abandon direct broadcasting and sold its station WEAF to RCA. A T & T then won RCA's assurance that it would drop plans to build an independent long-line system of wires. In addition, RCA, GE, and Westinghouse set up the National Broadcasting Company to exclusively handle broadcasting and contracted to lease the A T & T web of wires. NBC, with this powerful corporate backing, began to offer the first regular national broadcasting over two networks based in New York.

The dream of transcendence through machines is an ancient one, and the urge to annihilate space and time found particularly intense expression through new communications media. Overcoming the old constraints of time and space implied a great deal more than mere advances in physics. Generally speaking, popular reactions to dramatic improvements in communication emphasized the possibilities for strengthening a moral community and celebrated the conquering of those vast social and cultural distances that had traditionally kept the large majority of people isolated.

An especially strong utopian cast marked contemporary responses to the telegraph and the wireless. The public greeted the first telegraph lines of the 1840s with a combination of pride, excitement, sheer wonder, and some fear. As telegraph construction proceeded quickly in all directions, doubters, believers, and curious bystanders in dozens of cities and towns flocked to get a firsthand look. In 1844 Alfred Vail, Morse's assistant, reported that at the Baltimore end of their experimental line crowds besieged the office daily for a glimpse of the machine. They promised "they would not say a word or stir and didn't care whether they understood or not, only they wanted to say they had seen it." The first telegraph offices had to take these excited crowds into account. Walling off inquisitive onlookers with glass partitions, an early Pittsburgh office announced: "Ladies and Gentlemen, visiting the room merely as Spectators, are assigned ample space, as the most Perfect Order is desirable for the convenience of the public as well as of the Telegrapher."1

Successful completion of the first Atlantic cable in the summer of 1858 inspired wild celebrations around the country. Such intense
public feeling about a technological achievement appears rather strange to us now; certainly it is difficult to envision such a reaction today. Bonfires, fireworks, and impromptu parades marked the occasion across the nation. New York City held a huge parade, which was described as the city's largest public celebration ever. Over fifteen thousand people, from working men's clubs, immigrant societies, temperance groups, and the like, marched in a procession that revealed the strength of the telegraph's hold on the public imagination.

A widely evinced sentiment held that "the Telegraph has more than a mechanical meaning; it has an ideal, a religious, and a prospective significance, far-reaching and incalculable in its influences." The subtle spark of electricity, one of the fundamental, if dimly understood, creative forces of the universe, was now at man's disposal. The telegraph applied "marvellous energy to the transmission of thought from continent to continent with such rapidity as to forestall the flight of Time, and inaugurate new realizations of human powers and possibilities." The divine boon of the telegraph allowed man to become more godlike. "It is the thought that it has metaphysical roots and relations that make it sublime." Such paens rhythmically united the technological advance in communication with the ancient meaning of that word as common participation or communion. They presumed the success of certain Christian messages; but they also suggested that the creation of a miraculous communications technology was perhaps the most important message of all.²

One can discern a direct link between the more spiritually toned early responses and the boom in electronic revivalism today. There seems no doubt in the minds of contemporary evangelists about the answer to Morse's query, "What hath God wrought?" The most effective and avant-garde use of the latest communications technologies is probably being made by the various evangelical preachers who regularly "thank God for television" as they broadcast revivals over vast cable and satellite hookups. As Bishop Fulton J. Sheen, a pioneer in the field, once remarked: "Radio is like the Old Testament, hearing wisdom, without seeing; television is like the New Testament because in it the wisdom becomes flesh and dwells among us."³

There were secular prophets as well, equally awed by the transforming potential of instantaneous communication. "I see the electric telegraphs of the earth/I see the filaments of the news of the wars, deaths, losses, gains, passions of my race," sang Walt Whitman in "Salut Au Monde" (1856). We know, of course, that those telegraphs ultimately were appropriated by the corporate power of Western Union and the Associated Press. But perhaps Whitman used "filaments" in a double sense, including its traditional meaning as part of the reproductive organs of a flower. If so, he conjured a potent predictive insight. For the telegraph, which we might take as a historical synecdoche for all the electronic media that followed, did more than carry the news. It helped create novel ways of chronicling, reporting, and dramatizing the "wars, deaths, losses, gains, passions" of the society. Our historical knowledge of these forms and their internal relations—from wire service reports and syndicated columns through tabloids, newsreels, and network news—remains surprisingly skimpy.

A more privatized type of utopian response greeted the first wireless devices of the 1890s and early 1900s. In the writings of scientists, amateur enthusiasts, and trade publications, one finds repeated projections of how wireless technology would soon be tailored to fit the personal needs of operators. Many observers of the rapidly advancing scene believed "we shall talk with our friends at sea or from sea to land, or from New York to Peking almost as freely as we now talk to our neighbors in the next block. An opera performance in London or Berlin will be caught up by this new transmitter set about the stage and thrown into the air for all the world to hear . . . it may be that no farm or fireside will be without one."⁴

Today we think of radio as synonymous with broadcasting, but in the first years after the earliest broadcasts the amateur wireless community scoffed at the idea that radio ought to be dominated by a few big stations. The activity of wireless amateurs from around 1905 through the late 1920s is too often neglected as a factor in the history of radio. The "hams" provided a crucial demand for wireless equipment, supplying the original seed capital and audience for the radio industry. They bought radio equipment and kept up with the latest technical advances before and after the first broadcasting. This group numbered perhaps a quarter of a million around 1920, including some fifteen thousand amateur transmitting stations.

Throughout the 1920s radio mania remained an active, participatory pastime for millions. One had to constantly adjust and rearrange batteries, crystal detectors, and vacuum tubes for the best reception. For numerous radio fans of all classes, the excitement lay precisely in the battle to get clear reception amidst the howling and chatter of the crowded ether. The cult of "DXing," trying to receive the most distant station possible, remained strong for years. In 1924
one newly converted radio fan wrote, not untypically, that he was not especially interested in the various programs. "In radio it is not the substance of communication without wires, but the fact of it that enthralls. It is a sport, in which your wits, learning, and resourcefulness are matched against the endless perversity of the elements. It is not a matter, as you may suppose, of buying a set and tuning in upon what your fancy dictates."

By the end of the 1920s, however, the ascension of corporate-dominated commercial broadcasting radically curtailed this sort of radio activity. Broadcasting, originally conceived as a service by manufacturers for getting people to buy surplus radio equipment, eventually shoved aside the very people who had nurtured it. In its mature state, radio succeeded not in fulfilling the utopian visions first aroused by wireless technology, but rather in incorporating those urges into the service of advertising. First in radio and then in television, commercial broadcasting became the cutting edge of a technologized ideology of consumption. Consumer goods promised to make one happy by returning what had vanished. "Nostalgia," originally a painful melancholy caused by absence from one's home or country, has acquired a primarily temporal sense since the rise of broadcasting. One has nostalgic, bittersweet longings for earlier, "simpler" times, and these times are most frequently signified by a "golden age" of radio, movies, popular music, and so forth. Commercial broadcasting wedded the advertiser's message to older popular cultural forms that were transferred to the new home environment of radio.

Today, the advertising and marketing axis that grew up with radio has made audience demographics the crucial template for the production of most of our culture's symbolic forms of expression. The term life-style best captures the essence of the current version of this ideology of consumption. A catchall description for everything from one's clothing, work, or furnishings to preferred leisure pursuits, entertainments, and inebriates, this phrase already seems to have achieved saturation. It reduces all life to a style, equating how one lives with what one consumes. The post-World War II perfection of demographics as a predictive science and as a producer of crucial cultural maps is a story that remains to be told.

The cultural history of modern media, that is, the evolution of their content and the relation of that content to the larger popular culture, reveals another set of contradictions at work. To the extent that popular culture may be equated with the popular arts, modern media have operated mainly as business enterprises intent on maximizing profits. Especially within the broadcast media, the authority of advertising has been paramount in the establishment of cultural parameters and in the promotion of the consumption ethic as the supreme virtue. But this hegemony has never been as complete and total as it seemed on the surface. The media have not manufactured content out of thin air. Historically, the raw materials for media fare, as well as its creators, have been drawn from an assortment of cultural milieux.

The cultural histories of American film, radio, and television, particularly in their early years, could arguably be written entirely from the point of view of the contributions of "the others," immigrant, ethnic, and racial minorities in particular. The critical part played by immigrant audiences and Jewish immigrant entrepreneurs in the rise of the movie industry is well known. Slapstick comedy, raucous, vulgar, and universally appealing, was the first style to pack audiences in. It was also the first style to be identified as uniquely American around the world. Only in Hollywood could a Fatty Arbuckle be transformed in three years from a semiskilled plumber's helper into a comedy star making five thousand dollars a week. When the Warner brothers made the great leap into the sound era in 1927, it was not by accident that they chose The Jazz Singer, starring Al Jolson, as their vehicle. Its story of how a cantor's son renounces his father's religion for a career as a popular singer encapsulated both the history of the movie industry itself and the rapid secularization of Jewish life in America. The early film industry was energized in large part by a projection of the powerful urge toward collective representation so prominent in Jewish culture. The Jewish moguls reinvented the American dream in the course of creating the Hollywood mythos.

In the case of broadcasting, the exigencies of advertising demanded that programming present an aura of constant newness. Yet the content relied heavily upon traditional forms. Variety shows, hosted by comedians and singers, became the first important style on network radio. Drawing heavily upon the vaudeville format, these shows remained quite popular through World War II; many of the stars continued their success on television. The master of ceremonies served as a focal point for activity and as a means of easy identification with a sponsor's product. Most of the variety stars had long experience in earlier stage entertainment; ethnic and regional
stereotypes, dialect stories, and popular song, all staples of vaudeville and burlesque, easily made the transition to broadcasting. So too did the pre-Civil War form of minstrelsy. The characters in radio's first truly national hit show, "Amos n' Andy" (1928), were direct descendants of blackface minstrel show figures.

These entertainments, and radio in general, seemed to have played a significant mediating role for certain audiences. There is intriguing fragmentary evidence suggesting that, in the early years of radio at least, children of immigrants, particularly in cities, were more likely to own radios than any other group. The census of 1930 revealed that 57.3 percent of the children in families of foreign or mixed parentage owned radio sets, as compared with 39.9 percent in families of native parentage. Among urban families, the figures were 62.8 percent (highest of any group) and 53.2 percent, respectively. The historical relation between "media mindedness" and "cultural otherness" is still largely unexplored, beyond a facile notion of "Americanization."6

The history of American popular music in this century offers perhaps the clearest example of how media content has been continually invigorated and revitalized by forms, styles, entertainers, and artists from outside the mainstream. The growth of radio broadcasting and the recording industry in the 1920s hastened the cross-fertilization of popular (but hitherto localized) musical forms. America's rich racial and geographical diversity of authentic folk musics—country, "mountain music," blues, jazz—became commercialized and available to much broader audiences. The new media allowed audiences and artists exposure to musical forms previously unknown to them. The post-World War II rise of rock'n' roll, closely allied to the more general phenomenon of youth culture, reflected a vital new amalgam of white country music, black blues, and traditional Tin Pan Alley show music.

Recent infusions of Third World musics such as reggae, ska, and salsa point to the growth of an international, multicultural style in popular music. Beneath all its glitter and flash, the disco boom is fundamentally based on the popularization of Latin dance rhythms, spiced with the urban gay sensibility. The power of the recording and radio industries to standardize and exploit popular music, to hype stars and trends, ought not to be ignored or minimized. But denial of the authenticity at the core of much popular music grossly simplifies the complex tensions existing within our popular culture.

Before I discuss several of the latest developments in communications-technology, it might prove instructive to cast a fleeting look backward at two early media dreamers, Edward Bellamy and Hugo Gernsback. In 1889 Bellamy, America's preeminent utopian, elaborated an idealized vision of future communications in his short story "With the Eyes Shut." He described the dream of a railroad passenger suddenly transported into a whole new world of media gadgets. Phonographed books and magazines have replaced printed ones in railroad cars. Clocks announce the time with recorded sayings from the great authors. Letters, newspapers, and books are recorded and listened to on phonographic cylinders, instead of being read. With a slide-projecting phonograph, one can even listen to a play while watching the actors. Everybody carries around an indispensable item, a combination tape recorder and phonograph. Bellamy seems most concerned that the sense of hearing threatens to overwhelm that of sight. But what stands out in his fable is the limitless choice of programming available to the individual in a private setting.

Whereas Bellamy's fantasy spun images of inexhaustible "software," Hugo Gernsback, science-fiction writer and wireless enthusiast, was captivated by the radical potential of radio "hardware." In the early 1900s Gernsback tirelessly promoted amateur wireless activity in his own magazines and others. The culmination of this work came in his book Radio For All (1922), which projected "the future wonders of Radio" fifty years hence. Gernsback predicted the coming of television, videophones, telex, and remote-controlled aircraft. He managed to think up some devices we seem to have missed: radio-powered roller skates, radio clocks, even a "radio business control" console. As the frontispiece to Gernsback's book shows, he envisioned a future where an individual's radio equipment would be at the very center of business and social life.

Atavistic expressions of the utopian urges given voice by Bellamy and Gernsback appear all around us today. Only now, with the advent of new satellite and video technologies, their fantasies have a firmer material base. Of course, Bellamy's "software socialism" and Gernsback's "hardware socialism" hardly appear to be lurking around the corner; corporate capital has enormous resources invested in the expansion of that material base. The press is filled with stories detailing the maneuvers of RCA, Warner Communications, MCA, SONY, and all the rest in the scramble to get a piece of the new action. No one can deny the central position of big capital in
the new advances. But the recent developments may still promise in essence what they appear to deny in substance.

The accelerated evolution of media hardware and software has been fueled largely by the persistence of utopian urges in the population at large. With the impending spread of cheap video hardware to large numbers of people—video cameras, cassette recorders, video disc players, and home computers—the potential exists for individuals and collectives to become producers as well as consumers. The historical gap in broadcasting between the oligopoly of transmission and the democracy of reception may thus be drastically reduced. It is important to see the interaction between the corporate giants and the deep and genuine desire on the part of people to gain more direct control over the means of communication and the content of communications. The recent revival of the cable television industry is a good case in point.

The decentralizing capacity of cable television has long been recognized, if not actually realized. Indeed, by the early 1970s, the "blue-sky" predictions that ended nearly every discussion of cable in the 1960s seemed laughable. The cable industry was in a great depression, with very little wiring of communities taking place. All talk about public access channels, two-way hookups, video telephones, home computer terminals, and so forth seemed quite hollow because scarcely any cable companies could get financing to wire homes. Even in New York City, potentially the most lucrative market, both cable franchises were losing millions each year. But two new factors added to the scene in the last five years or so have rejuvenated the industry and freed venture capital.

First, the rise of pay cable services such as Home Box Office (HBO) and Showtime revealed an extensive latent demand for alternative programming. These channels charge a premium each month above the basic cable rate. HBO, owned by Time-Life and the dominant force in pay cable, began with a simple formula of old movies and live sports. It is now moving rapidly toward providing more original programming, such as entertainment specials, comedy shows, plays, and even something it dubs "docutainment," which sounds rather like a modern version of the old "March of Time" newsreels.

Second, the success of RCA's and Western Union's communication satellites has created viable distribution networks for the cable companies. Earth station receivers, costing anywhere from two thousand to twenty thousand dollars, allow cable operators to "get on the bird." Programmers are now busily putting together new networks and pay services aimed at reaching the growing cable audience. The availability of new and specialized programming in turn has stimulated a new demand for cable systems in various communities. Presently, about fifteen million American homes are wired for cable; some industry analysts think the figure could be 80 percent of all television homes by 1990.

Insofar as the power of commercial network television is based on its ability to deliver mass audiences to advertisers, its strength may soon be challenged by the decentralizing trend in cable. Several new networks aimed at specialized audiences have been created already: children, Hispanics, senior citizens, sports junkies. Cable and its attendant new video technologies will, at the very least, mean the decline of mass market television, breaking the thirty-year-old grip of the three commercial networks. The potential for eventual direct satellite transmissions to homes, bypassing local stations and cable systems alike, is also very real. The technological stage is now set for the postbroadcasting era.

Many cable programmers hope to profit in much the same way as special interest magazines, by precisely targeting a well-defined fraction of the population that certain advertisers wish to reach exclusively. The concept is known as "narrowcasting." One might legitimately ask what is so promising about these developments; the specter of "demographic" cable programming is rather depressing. For the present, however, one could argue that the revival of the cable industry itself has been a positive development, spurred by the push and pull between people who want alternative programming and programmers who want to see a greater cable market before they invest. There is no doubt that the hardware is now far ahead of the software. The crucial question has become, Can imaginative and innovative programming be created to take advantage of the new technologies?

The key point is that all of the independent program developers, artists, and political activists, who for years have been thwarted by the current system and could never get on the networks, now have a potential way to reach large audiences. A show that reaches twenty million people over network television today is considered a failure; this sort of standard will of necessity change. The new networks of distribution provide possible entry points for independents to reach viewers. Perhaps the most promising new nodes will be local cable and video discs.

Local cable companies all provide a surfeit of channels, including public access and leased channels. For a very small fee, public
access channels allow total freedom for live, local programming. Most cable systems also have channels that can be leased by local groups who have lined up sponsors for their program. This whole area is currently in an embryonic state of development, although some communities are farther advanced in exploiting the potential for grass-roots programming.

There are still large unanswered questions about the video disc, which has just begun to be mass marketed. Video discs represent a more passive activity than video cassettes in that one will not be able to make one's own discs; video disc is to video cassette as phonograph records are to tape. The advantage of video disc, however, is to be its superior quality of picture and sound and its lower cost. The big guns in the field have invested heavily in the home video market of nonbroadcast television. RCA's Selecta-Vision system reportedly represents its largest investment ever in a single product; it has also made a long-term deal with CBS to provide additional disc software. Similarly, N. V. Philips, the Dutch conglomerate, has contracted with MCA to provide software for its Magna-Vision home video center. These kinds of arrangements are likely to increase, but the outlook for software supply, as all concerned agree, leaves more room for independent activity. Local and national networks for video disc rental, sales, and production are already being formed.

Despite all of the high-powered market research and corporate wheeling and dealing, no one is quite certain how the video disc phenomenon will evolve. Incredibly, RCA projects a $7.5 billion video disc market by 1990, but capital could be wrong. Two crucial jokers in the deck are the incompatibility of various disc systems and, more importantly, the increasingly shaky state of the American economy. Will new communications hardware be affordable?

Given the nature of the continuing energy crisis, one could argue that in a broad sense communication must gain primacy over transportation in our society. An awareness of the dialectical tensions within the American media may explain why it is possible to criticize the worst tendencies of modern media—banalization, encouragement of the commodity fetish, the urge toward global hegemony—but at the same time to hold out real hope for future promise. It is less important to curb futurist fantasies than to continually attempt to expose the hidden political and social agenda attending technological progress. The recovery of historical perspective, bringing the contradictions within American media into sharper relief, can perhaps help us to remember the future of modern communication.


30. Ibid., pp. 21, 113, 50.

31. Ibid., pp. 98–100, 42, 128.

32. See, for example, McLuhan, "An Ancient Quarrel in Modern America."


39. Dorothy Lee, "Lineal and Nonlineal Codification of Reality" and Siegfried Giedion's "Space Conceptions in Prehistoric Art" are reprinted in McLuhan and Carpenter, *Explorations in Communication*. For Carpenter's work on the Eskimos, see "Eskimo Space Concepts," *Explorations*, no. 5 (June 1955): 131–45, and *Explorations*, no. 9 (last issue, 1959), which was entirely devoted to Eskimo culture. See also Dorothy Lee, "Linguistic Reflections of Winti Thought," and Jacqueline Winti, "The Magic Eye" (on ancient Indian architecture), also reprinted in *Explorations in Communication*.

40. Marshall McLuhan and Edmund Carpenter, *Acoustic Space*, reprinted in...


43. This distinction between Innis and McLuhan is the central thesis of Carey, "Harold Adams Innis and Marshall McLuhan."

44. McLuhan, The Gutenberg Galaxy, p. 33. For a critique of this position see Miller, Marshall McLuhan, pp. 84–110.


46. Ibid., pp. 153, 176.

47. Ibid., pp. 165, 330.


49. McLuhan, Understanding Media, p. 32.

50. Ibid., pp. 51, 54, 55.

51. Ibid., p. 56.


57. I cannot possibly offer a treatment of these fields here, but I can at least note the importance, for my own thinking, of the work of Claude Levi-Strauss, Noam Chomsky, and Roland Barthes. For a short but useful review of these and other thinkers in the structuralist tradition, as they relate to the study of modern media, see Varda Langhols Leymore, Hidden Myth: Structure and Symbolism in Advertising (London: William Heinemann, 1975), pp. 1–17.

EPILOGUE


