CHAPTER 6

Space, Time, and Communications

A TRIBUTE TO HAROLD INNIS

During the third quarter of this century, North American communications theory—or at least the most interesting part of it—could have been described by an arc running from Harold Innis to Marshall McLuhan. "It would be more impressive," as Oscar Wilde said while staring up at Niagara Falls, "if it ran the other way." Innis's work, despite its maddeningly obscure, opaque and elliptical character, is the great achievement in communications on this continent. In *The Bias of Communication, Empire and Communication, Changing Concepts of Time* and in the essays on books on the staples that dominated the Canadian economy, Innis demonstrated a natural depth, excess, and complexity, a sense of paradox and reversal that provides permanent riddles rather than easy formulas. His texts continue to yield because they combine, along with studied obscurity, a gift for pungent aphorism, unexpected juxtaposition, and sudden illumination. Opening his books is like reengaging an extended conversation: they are not merely things to read but things to think with.

But beyond these intellectual qualities Innis had an admirable and indispensable moral gift expressed throughout his life but perhaps most ardently in his opposition to the cold war and the absorption of Canada into it and in his defense of the university tradition against those who would use it as merely another expression of state or market power.

The very opaqueness and aphoristic quality of his writing, when combined with its critical moral stance, has left his

work open to be assimilated into and contrasted with newer developments in scholarship that have occurred since his death: developments in cultural geography, Marxism and critical theory, cultural anthropology and hermeneutics. But the significance I am after derives from Innis's place in North American communication theory and, in particular, in relation to work in the United States.

I

Research and scholarship on communication began as a cumulative tradition in the United States in the late 1880s when five people came together in Ann Arbor, Michigan. Two were young faculty—John Dewey and George Herbert Mead—and two were students at the time—Robert Park and Charles Cooley. The final element of the pentad was an itinerant American journalist by the name of Franklin Ford, who shared with Dewey—indeed, cultivated in him—the belief that "a proper daily newspaper would be the only possible social science."[1]

Like most intellectuals of the period, this group was under the spell of Herbert Spencer's organic conception of society, though not enthralled by social Darwinism. The relationship between communication and transportation that organicism suggested—the nerves and arteries of society—had been realized in the parallel growth of the telegraph and railroad: a thoroughly encephalated social nervous system with the control mechanism of communication divorced from the physical movement of people and things.

They saw in the developing technology of communications the capacity to transform, in Dewey's terms, the great society created by industry into a great community: a unified nation with one culture, a great public of common understanding and knowledge. This belief in communication as the cohesive force in society was, of course, part of the progressive creed. Communications technology was the key to improving the quality of politics and culture, the means

for turning the United States into a continental village, a pulsating Greek democracy of discourse on a 3,000-mile scale. This was more than a bit of harmless romanticism; it was part of an unbroken tradition of thought on communications technology that continues to this day and that Leo Marx (1964) named and I appropriated as the "rhetoric of the technological sublime."

Three other features of the work of the Chicago School, as it was called, are worth noting. First, methodologically they were in a revolt against formalism, in Morton White's (1957) happy phrase: they attempted to return social studies to a branch of history and to emphasize the interdisciplinary nature of social knowledge. Second, they were under the spell of the frontier hypothesis, or at least a certain version of it. The significance they found in the frontier was not that of the heroic individual breaking his way into the wilderness; rather, they emphasized the process whereby strangers created the institutions of community life *de novo* in the small towns of the West. This process of community creation, of institution building was, they argued, the formative process in the growth of American democracy. Again, although there is more than a little romance with the pastoral in all this, it also led to a positive achievement. In the absence of an inherited tradition the active process of communication would have to serve as the source of social order and cohesion. (Moreover, the Chicago School scholars conceived communication as something more than the imparting of information. Rather, they characterized communication as the entire process whereby a culture is brought into existence, maintained in time, and sedimented into institutions. Therefore, they saw communication in the envelope of art, architecture, custom and ritual, and, above all, politics./ And this gave the third distinctive aspect to their thought: an intense concern with the nature of public life. As Alvin Gouldner (1977) has reemphasized, the idea of the public is a central notion in their thought, and although they agreed with Gabriel Tarde that the public is something brought into existence by the printing press, they went beyond him in trying to work through the conditions under which the public sphere gives rise to rational and

critical discourse and action.) In the 1920s these concerns crested and yielded a continuous stream of literature on communications, a central feature of which was a concern with the "vanishing public" or the "eclipse of the public" (Dewey, 1927). Despite their youthful optimism, many of the Chicago School came to see that although the mass media brought the public into existence, they later threatened the possibility of public life and with it the possibility of rational discourse and enlightened public opinion.

Harold Innis studied at the University of Chicago when Park and Mead were on the faculty and this tradition was in full flower. Moreover, these same intense concerns with communication were ripe within the city at large: in Jane Addams's Hull House, in Frank Lloyd Wright's architecture offices, in the writings of Louis Sullivan, and, above all, in the textures of the University of Chicago. There was a continuity and connection between Innis and the Chicago School, though Marshall McLuhan's claim that Innis "should be considered as the most eminent member of the Chicago group headed by Robert Park" (1964, p. xvi) is an absurdity. Park had no direct influence on Innis, and Innis was too singular a thinker to be described as a member of any school. Innis's transcript at the University of Chicago reveals he took a very narrow range of courses strictly limited to traditional topics within political economy. His only outside work was one course in political science on municipal government offered by the greatest Chicago political scientist of the time, Charles Merriam.[2] My only claim is this: the significance of Innis is that he took the concerns of the Chicago School and, with the unvarnished eye of one peering across the 49th Parallel, corrected and completed these concerns, marvelously widened their range and precision, and created a conception and a historically grounded theory of communications that was purged of the inherited romanticism of the Chicago School and that led to a far more adequate view of the role of communications and communications technology in American life.

By the time Innis started to write about communications, Chicago sociology had pretty much run itself into the sand. During the 1930s it was transformed into symbolic

interactionism, a social psychology of the self and others drawn from the work of Mead. However elegant this work might be, it was also safely tucked away from the questions of politics, rationality, power, and social change that Chicago sociologists had earlier engaged.

American studies in communications then came under two influences. The first arose from work on psychological behaviorism initiated by John B. Watson immediately prior to World War I. Watson, both a professor at Columbia and a vice-president of J. Walter Thompson advertising agency, drew upon an accumulating body of work, principally from E. L. Thorndike, in animal psychology, and laid down a model of human action in which mind played no part in the arrangement of behavior. Transmitted into the study of communication, this provided the basis for a program of study in which communication became a branch of learning theory, in which learning was defined as the acquisition of behaviors and in which behaviors were governed in turn by conditioning and reinforcement. By removing mind from behavior, the possibility of rational action was removed also, but this was the precise and willing price to be paid for constructing a model of human social action on the postulates of physical science. Powerfully aided by the practical research demands of World War II, behaviorism gave rise to a power or domination model of communication in which study was narrowed into a focus on the means by which power and control are made effective through language, symbols, and media.

The second influence was more indirect but came initially from the powerful demonstration effect of the Hawthorn experiments. Conducted in a Western Electric plant in the Chicago suburbs, these studies gave rise to the often noted Hawthorn effect: that worker productivity rose over the cycle of the experiments because of the experiments themselves—Hawthorn gives us Heisenberg. What is less often noted is that the experiments were presumably a test of a model derived from Durkheim: that the factory should be viewed as an integrated social system to which the worker had to be adjusted. The findings of the experiments then gave rise to a new social role, a band of ambulatory counselors

whose task it was to resocialize the workers to their grievances. That is, the major lesson of the Hawthorn experiments was the discovery of the power of communication to serve as a means of therapy in the service of social control of the worker.

These movements in thought coalesced under Paul Lazarsfeld and his students, and communication studies in the immediate postwar years, impelled by the war effort and coordinate developments in cybernetics, were organized strictly as a subdiscipline of social psychology. Moreover, the models that guided this research yielded two alternative formulations of communication: in one model communication was seen as a mode of domination, in another as a form of therapy; in one model people were motivated to pursue power and in the other to flee anxiety. I characterize such models in this way to emphasize one simple point: these models were not merely models of communication, representations of the communication process. They were also models for the enactment of the communication process, powerful models of an actual social practice. Finally, the growth of these models within the intellectual community and the marriage of this social science to imitations of the physical sciences signaled a shift in the nature of American social scientists in general and communication students in particular. I refer here to the transformation of social scientists from a prophetic to a priestly class. It signaled the ingestion of social science into the apparatus of rule and a surrendering of the critical function of independent intellectuals.

These transformations in the study of communications connected, in turn, with a deeply recurrent cultural pattern in North America whereby the growth of technology in general—the printing press, literacy, communications technology in particular—is seen as part of a larger narrative of progress. The history of communications technology becomes the story of the expansion of the powers of human knowledge, the steady democratization of culture, the enlargement of freedom and the erosion of monopolies of knowledge, and the strengthening of the structures of democratic politics. From the onset of literacy through

the latest in computational gadgets, it is the story of the progressive liberation of the human spirit. More information is available and is made to move faster: ignorance is ended; civil strife is brought under control; and a beneficent future, moral and political as well as economic, is opened by the irresistible tendencies of technology.

This was the situation, admittedly reduced to a sketch, that pertained when Harold Innis died in the early 1950s. It is against this background that the achievement of Innis should be assessed. Innis produced a body of historical and theoretical speculation that sets out the major dimensions of communications history and the critical propositions and problems of communication theory, and he did so with maximal pertinence to circumstances in North America. This is the critical point. All scholarship must be and inevitably is adapted to the time and place of its creation. That relation is either unconscious, disguised, and indirect or reflexive, explicit, and avowed. Marx was among those who understood that scholarship must be understood in terms of the material conditions of its production as the prerequisite to the critical transcendence of those conditions. In an extended commentary on North American (and the only North American economist he took to be of importance, Henry Charles Carey) Marx described the distinctiveness of the North American social formation even as it resided within the framework of Western capitalism:

> Carey is the only original economist among the North Americans. Belongs to a country where bourgeois society did not develop on the foundation of the feudal system, but developed rather from itself; where this society appears not as the surviving result of a centuries-old movement, but rather as the starting-point of a new movement; where the state, in contrast to all earlier national formations, was from the beginning subordinate to bourgeois society, to its production, and never could make the pretence of being an end-in-itself; where, finally, bourgeois society itself, linking up the productive forces of an old world with the enormous natural terrain of a new one, has developed to hitherto unheard-of dimensions and with unheard-of freedom of movement, has far outstripped all previous work in the conquest of the

forces of nature, and where, finally, even the antitheses of bourgeois society itself appear only as vanishing moments (Marx, 1973: 884).

Innis happily accepted as a starting point the inevitably ethnocentric bias of social science. Despite the enormous range of his scholarship, he was tied to the particularities of North American history and culture and the peculiar if not unprecedented role that communications played on the continent. He recognized that scholarship was not produced in a historical and cultural vacuum but reflected the hopes, aspirations, and heresies of national cultures. American and British scholarship was based, he thought, on a conceit: it pretended to discover Universal Truth, to proclaim Universal Laws, and to describe a Universal Man. Upon inspection it appeared, however, that its Universal Man resembled a type found around Cambridge, Massachusetts, or Cambridge, England; its Universal Laws resembled those felt to be useful by Congress and Parliament; and its Universal Truth bore English and American accents. Imperial powers, so it seems, seek to create not only economic and political clients but intellectual clients as well. And client states adopt, often for reasons of status and power, the perspectives on economics, politics, communication, even on human nature promulgated by the dominant power.

This commitment to the historical and particular led Innis to pursue communications in a genuinely interdisciplinary way. He was simultaneously geographer, historian, economist, and political scientist and he located communications study at the point where these fields intersected. Like the Chicago School, he shared in the revolt against formalism and ransacked experience without regard to discipline. Most critically, he rescued communications from a branch of social psychology and freed it from a reliance on natural science models. He was committed to the notion of pluralistic centers of scholarship as essential to cultural stability. To this end he attempted to restore to economics and communications a historical model of analysis. The central terms that he brought to the study of communications—the limitations of technology, the spatial and temporal bias

inherent in technology, the monopolies of knowledge toward which they tend and which they support, the analysis of social change, selective advantage, cultural stability and collapse— were not the terms of a verification model. They were, instead, a made-in-the-kitchen group of concepts with which to examine the actual historical record. Variations in history and geography demanded in scholarship concomitant variation in social theory and cultural meanings. Like Patrick Geddes, the Scottish biologist whom he resembles and from whom he borrowed, Innis believed that the search for intellectual universals could proceed only through the analysis of radical particularities of history and geography. This relationship between imperial powers and client states, whether in the sphere of economics, politics, or communications, was expressed in his work by a series of polarities with which he described political and cultural relations: relations between metropole and hinterland, center and margin, capital and periphery, or, in the more abstract terms he preferred, time and space.

In short, Innis provided in communication studies, at a moment when virtually no one else in the United States was doing so, a model of scholarly investigation that was historical, empirical, interpretive, and critical. His work was historical, as I have said, in the precise sense that he wanted to test the limits of theoretical work, to show the actual variations in time and space that rendered transparent the dangerous claim of universal theory. The historical imagination checked off the bias of the theoretical one. It was empirical in that he attempted to exhume the actual historical record and not those ironclad laws of development with which we have been plagued from Hegel forward. His work was interpretive in that it sought the definitions, the varying definitions, people placed upon experience in relation to technology, law, religion, and politics. Finally, his work was critical in the contemporary sense in that he was not proposing some natural value-free study but a standpoint from which to critique society and theories of it in light of humane and civilized values.

Innis also reformulated the ideas of the Chicago School often in a quite explicit way and attacked, albeit indirectly,

the notions of communications that had gained currency in American historical and scientific scholarship. In particular, from his earliest work he argued against the major versions of the frontier hypothesis "so gratifyingly isolationist that the source of inspiration and action was not at the centre but at the periphery of Western culture." Every frontier, in short, has a back tier. The "back tier" interest was determined by the extent to which the frontier products strengthened its economy, supplemented rather than competed with its products, and enhanced its strategic position (Heaton, 1966). The first back tier was Europe, and to that extent North American economic and communications development was part of the trajectory of European history. The development of this continent was decisively determined by the policies and struggles of European capitals. The consequences of those policies and struggles were outlined in his studies of staples: fur, fish, timber, and so on. With the gradual decline of the influence of Europe, the back tier shifted to the North American metropolitan centers—both Canadian and American—but effective control shifted toward New York and Washington relative to both the Canadian and American frontiers. The studies of paper and pulp brought that home and also led to the realization that in mechanized forms of communications new types of empire and back-tier/frontier relations were elaborated.

> The United States, with systems of mechanized communication and organized force, has sponsored a new type of imperialism imposed on common law in which sovereignty is preserved *de jure* and used to expand imperialism *de facto* (Innis, 1950: 215).

In this observation he founded the modern studies that now exist under the banner of media imperialism, but his sense of the complexity of that relationship was considerably more subtle than that of most contemporary scholars. In particular, Innis knew something of the tensions, contradictions, and accommodations that existed between trading and communications partners. This allowed him, from the beginning, to pierce the organic metaphors that so often led

the Chicago scholars astray and masked the facts of history, geography, and power in a veil of metaphysics. Even if society were like an organism, there would be some controlling element, some centralized brain in the body, some region and group that would collect the power necessary to direct the nerves of communication and the arteries of transportation. There would be no transformation of the great society into the great community by way of disinterested technology but only in terms of the ways in which knowledge and culture were monopolized by particular groups.

Innis saw in the growth of communication in the late eighteenth and nineteenth centuries a continual process of decentralization and recentralization that moved forward in a dialectical way as small hinterland communities attempted to outrun metropolitan influence, only to be absorbed back into it later. The prevailing pattern of communication prior to the American Revolution was a classically imperial one. Messages moved on an east-west axis between London and the colonies. Communication between the colonies moved slowly and erratically, and in general the colonies communicated with one another via London. Following the revolution this same pattern prevailed for a time. News in early American newspapers was almost exclusively European in origin, and communication was stronger between the port cities and England than between the cities and their own American hinterland. Internal communication was slow and problematic, good only on the Atlantic sea corridor and only then when not adversely affected by weather. American towns and cities were relatively isolated from one another and connected only by common port cities or European capitals.

Following the War of 1812 the country embarked on a vigorous campaign for what were benignly called "internal improvements," the object of which, again benignly expressed, was an attempt to bind the nation together or connect the east with the west. In fact, what developed was the same pattern of communication of the colonial period but now with New York replacing London as the central element in the system. As Arthur Schlesinger, Sr. (1933) emphasized, what grew up over the first half of the

eighteenth century was a pattern of city-state imperialism. The major cities of the East vigorously competed with one another to replace London as the geographic center of trade and communications.

By the early 1800s New York was firmly established as the center of American communication and controlled the routes of trade and communication with the interior, a position it has never relinquished. It maintained first contacts with Europe through shipping and therefore information passed among American cities by being routed through New York. But every major city on the East Coast made its bid for control of the interior. New York's hegemony was secured by the Hudson River, the Erie Canal, and the resultant access to Chicago via the Great Lakes allowing New York to service and drain the Mississippi Valley. Philadelphia also attempted to control the West through an elaborate series of canals whose failure brought Pennsylvania to the verge of bankruptcy. Baltimore attempted through the first national highway, from Cumberland, Maryland, to connect into the Ohio River and terminate in St. Louis at the headwaters of the Missouri. Baltimore later tried with the Baltimore and Ohio Railroad, the first national railroad, to build this connection surer and faster; and even Boston, although blocked from the West by New York, attempted to become a railroad center and create access independent of the Erie Canal. As Alan Pred's (1973) studies have documented most thoroughly, the effect of the hegemony of New York was to draw the hinterland cities within its information field and to isolate the other East Coast cities.

New York's hegemony was in turn strengthened by the construction of the Illinois Central Railroad from Chicago to New Orleans. At the time of its building it was popularly called the "great St. Louis cut-off" because it was designed to isolate St. Louis from its natural trading partner, Baltimore. When the first transcontinental railroad was placed along the northern route, this again strengthened the centrality of New York. New York and therefore its merchants, firms, and elites controlled an increasingly centralized system of information that tied the northern tier together and even acted as a source of supply for many Canadian cities. It just as effectively

isolated the South. By every measure of communication the South, with the exception of New Orleans, was isolated from the rest of the country. There were poor interconnections between southern cities, and southern cities dealt with one another and the rest of the North only by first channeling communication through New York.[3]

Although this pattern of information movement has been importantly altered since the 1840s, its persistence, at least in outline, is even more striking. To be sure, the trade routes of culture laid down by the canal and railroad have been altered by the telegraph, wire services, magazines, films, telephone, broadcasting, and jet aircraft. But the centrality of New York in the flow of communications and culture, the importance of the New York-Washington corridor, and the metropole-hinterland connections that flow east and west are still there to be observed. In other words, despite the enormous size of the United States, a particular pattern of geographic concentration developed that gave inordinate power to certain urban centers. This development undercut local and regional culture. Although it aided in forming a national culture, it disguised how local— even provincial—this national culture was: a national and even international culture was defined increasingly by how the world was seen from a couple of distinctively local places. The point is that since 1800 we have lived with essentially a dominant eastern corridor of American communication that has created an effective monopoly of knowledge in news and entertainment. Concretely, today this means that a few national figures and themes are pretty much exclusively focused on politics and entertainment, that local issues are of interest only when they can be alchemized into national issues of concern in a few urban centers, and that the drama of news and entertainment must be made increasingly slick and abstract to appeal to national and, increasingly, international audiences.

Innis was also sensitive to the means by which the hinterland was in a continual struggle both to escape and to accept metropolitan dominance. There was an important truth in the Chicago School's notion of the importance of local community-building as a formative democratic experience.

In his essay entitled "Technology and Public Opinion in the United States" (1951), Innis attempted to show how localities and regions resisted the spread of communication, how the relationship was decided by a protracted series of conflicts over the spread of standard time, the mail order house, parcel post and rural free delivery, the department store and regionalized corporation. Moreover, he was concerned to point out how the Western newspaper was an instrument for resisting metropolitan dominance, how the telegraph initially strengthened the local and regional press until that too was undercut by the power of the wire services and chain papers. That is, the spread of a spatially biased system of communication was not even and uniform but resulted in a complicated interplay of resistance and acceptance that we have yet to adequately lay out in detail.

Moreover, the pattern of national spatial organization was reproduced in the organization of city after city and county after county. Seymour Mandelbaum's *Boss Tweed's New York* (1965) is a marvelous though often complacent study of the reorganization of New York City essentially on a metropole-hinterland model. My own studies suggest that same model of development holds true at the regional and county levels.

The United States, then, at all levels of social structure pursued what I call a high communications policy, one aimed solely at spreading messages further in space and reducing the cost of transmission. That is what Innis meant by exploiting the spatial bias of modern communication. Communication was seen, in other words, solely in the envelope of space and power. That communication might be seen as something else, as a container of human interaction that allows for the persistence and growth of culture, is a view that never entered policy. The distinction between power and container technology parallels Innis's distinction between space and time. But what Innis saw more clearly than most was how modern institutions were thoroughly infected by the idea of space. The universities were not exempt. Economics, political science, urban planning, sociology, and the physical sciences charted the problems and challenges of society in space. Even time was converted to space as the social sciences, enamored of prediction,

characterized the future as a frontier to be conquered. Even historians caught the bug using time merely as a container to tell the narrative of progress: politics, power, empire, and rule.

In summary, as the United States pursued an almost exclusive policy of improving communication over long distance, as it saw communication as a form of power and transmission, the effective units of culture and social organization underwent a radical transformation. There was a progressive shift from local and regional units to national and international ones, though not without considerable struggle and conflict. Individuals were linked into larger units of social organization without the necessity of appealing to them through local and proximate structures. Communication within these local units became less critical for the operation of society and less relevant to the solution of personal problems. Finally, the growth of long-distance communication cultivated new structures in which thought occurred—national classes and professions; new things thought about—speed, space, movement, mobility; and new things to think with—increasingly abstract, analytic, and manipulative symbols.