

Swift, Thoreau, and Innis

Space, time, and technological innovation in communications

Michael Bristol takes up the theme of ends and means in communications, and invites us to look retrospectively rather than prophetically, and with "critical respect", at the way in which resistance to technological pressures has been most ably expressed in the past. Swift's satire, of the wondrous Lagadan machine whereby "the most ignorant Person at a reasonable Charge... may write books... without the least Assistance from Genius or Study," was aimed at "a kind of intellectual vanity (that proposes) replacing the more ambiguous forms of natural language... by a mathematically precise and unequivocal information system." Citing Thoreau at some length as well, and the modern Harold Innis, he outlines for us a range of thoughtful responses to the pressures exercised by space-binding and time-binding technologies on human resources and human creativity - pressures that have been with us for a long time.

The purpose of any theory or critique of communications practice is to address the problem of ends and means. As teachers centrally concerned with language and with human expression, our mission is not confined to the transmission of skills and the development of communicative process or technique; we are, in my opinion, committed to a view of learning that asks questions about the purposes of communication, about the ends as well as the means. We are interested in the who and the what of communicative practice, in the message as well as the medium. Stated briefly, the argument to be presented here is that every medium of communication has a characteristic bias, not only at the level of a particular orientation of sensory involvement described so

vividly by Marshall McLuhan, but also and more centrally at the level of institutions and of the effect of these institutions on the concentration of social authority described so comprehensively by Harold Innis. What Innis helped us to understand is that a technology is not an impersonal force operating on its own, as some of the current rhetoric seems to suggest, but rather a specific state of affairs brought about by particular groups and individuals acting in the furtherance of their own interests. Each medium helps to create a specific monopoly of knowledge, and this in turn has a pervasive effect on the prevailing way of life, on forms of social organization, and on the way each of us is able to use his time-energy budget.

The critique I intend to present is more retrospective in character than it is prophetic. I'm somewhat less concerned with the implications of a specific technology than with the more general problem of technological innovation and the social and cultural effects of such innovation. It is not technology itself so much as the exaggerated claims made for new technology that I would like to question, as well as the sense of urgency so often expressed by those who favour the adoption of a particular communication technology and its widespread incorporation into our daily lives. In place of the current myth of innovation and obsolescence, this critique expresses "critical respect for that which once was and cannot be entirely superseded."

Swift

In the third voyage of *Gulliver's Travels*, Swift depicts a society of scholar-scientists obsessively pre-occupied with language and anxiously concerned to develop improved techniques for communicating their ideas. One of the projects developed in the grand Academy of Lagado is a "Project for improving speculative Knowledge by practical and mechanical operations." The purpose and the means for achieving it are described in the following passage.

"Every one knew how laborious the usual Method is of attaining to Arts and Sciences; whereas by his Contrivance, the most ignorant Person at a reasonable Charge, and with a little bodily Labour, may write Books in Philosophy, Poetry, Politicks, Law, Mathematicks and Theology, without the least Assistance from Genius or Study. He then led me to the Frame, about the Sides whereof all his Pupils stood in Ranks. It was Twenty Foot square, placed in the Middle of the Room. The Superficies was composed of several Bits of Wood, about the Bigness of a Dye, but some larger than others. They were all linked together by slender Wires. These Bits of Wood were covered on every Square with Papers pasted on them; and on these Papers were written all the Words of their Language in their several Moods, Tenses, and Declensions, but without any Order. The

Professor then desired me to observe, for he was going to set his Engine at work. The Pupils at his Command took each of them hold of an Iron Handle, whereof there were Forty fixed round the Edges of the Frame; and giving them a sudden Turn, the whole Disposition of the Words was entirely changed. He then commanded Six and Thirty of the Lads to read the several Lines softly as they appeared on the Frame; and where they found three or four Words together that might make Part of a Sentence, they dictated to the four remaining Boys who were scribes. ... the Professor shewed me several Volumes in large folio already collected, of broken Sentences, which he intended to piece together; and out of those rich Materials to give the World a compleat Body of all Arts and Sciences... "

Mechanization eliminates the laboriousness of creating knowledge; it also makes both genius and study unnecessary. There is yet a further device in Lagado, however, that eliminates any need for human language altogether.

"(It was) a scheme for entirely abolishing all Words whatsoever: And this was urged as a great Advantage in Point of Health as well as Brevity. For, it is plain, that every Word we speak is in some Degree a Diminution of our Lungs by Corrosion; and consequently contributes to the shortening of our Lives. An expedient was therefore offered, that since Words are only Names for Things, it would be more convenient for all Men to carry about them, such Things as were necessary to express the particular Business they are to discourse on. And this Invention would certainly have taken Place, to the great Ease as well as Health of the Subject, if the Women in Conjunction with the Vulgar and Illiterate had not threatened to raise a Rebellion, unless they might be allowed the Liberty to speak with their Tongues, after the Manner of their Forefathers: Such constant irreconcilable Enemies to Science are the common People."

The upside down logic of Lagado gestures back towards norms of discourse and social interaction that Swift understood as axiomatic. The distrust of natural language that motivates the Lagadans is, in Swift's view, quite unwarranted. Dissatisfaction with the resources of language and other traditional forms of expression are shown to arise out of a kind of intellectual vanity, and out of the desire, quite objectionable to Swift, to dominate and control the social process by replacing the more ambiguous forms of natural language and customary social practice by a mathematically precise and unequivocal information system. The underlying point here is that language cannot be understood as exclusively instrumental; it is not merely a means to some narrowly defined end. For Swift, language cannot be contemplated as separate from the social process as a whole, and it cannot be investigated or taught as a neutral or value-free medium or technique.

Thoreau

Swift was writing in what was still a pre-industrial culture, and, despite his quite remarkable anticipatory vision of the technologizing of language, Gulliver's Travels does not contain a general critique of the process of industrialization. There is such a critique, however, in Thoreau's Walden, including a specific critique of what were then important new communications institutions, the daily newspaper and the railroad.

"... I am sure that I never read any memorable news in a newspaper. If we read of one man robbed, or murdered, or killed by accident, or one house burned, or one vessel wrecked, or one steamboat blown up, or one cow run over on the Western Railroad, or one mad dog killed, or of one lot of grasshoppers in the winter - we never need read another. One is enough. If you are acquainted with the principle, what do you care for a myriad instances and application? To a philosopher all **news**, as it is called, is gossip, and they who edit it and read it are old women over their tea. Yet not a few are greedy after this gossip. As for Spain, for instance, if you know how to throw in Don Carlos and the Infanta, and Don Pedro and Seville, and Granada, from time to time in the right proportions, they may have changed the names a little since I saw the papers, and serve up a bullfight when other entertainments fail, it will be true to the letter, and give us as good an idea of the exact state or ruin of things in Spain as the most succinct and lucid reports under this head in the newspapers: and as for England, almost the last significant scrap of news from that quarter was the revolution of 1649; and if you have learned the history of her crops for an average year, you never need attend to that thing again, unless your speculations are of a merely pecuniary character."

This last observation reveals that Thoreau understood very clearly the primary end for which the newspaper is devised, namely to facilitate what he calls "Pecuniary interests." The passage as a whole draws attention to the shallow and reiterative character of news, or as it is sometimes called, information, especially when contrasted with what Thoreau believed was real knowledge. "What news. How much more important to know what that is which was never old." For Thoreau, knowledge is identified with values of duration and continuity. "If we respected only what is inevitable and has a right to be, music and poetry would resound along the streets." Obviously the rapid and reliable service offered by the daily papers doesn't interest Thoreau precisely because it is so rapid. In fact, as his remarks about the railroad and the telegraph show, time and duration are more central than rapid movement or conquest of space.

"Our inventions are wont to be pretty toys, which distract our attention from serious things. They are but improved means to an unimproved end, an end which it was already but too easy to arrive at, as railroads lead to Boston or New York. We are in great haste to construct a magnetic telegraph from Maine to Texas; but Maine and Texas, it may be, have nothing important to communicate... As if the main object were to talk fast and not to talk sensibly. We are eager to tunnel under the Atlantic and bring the Old World some weeks nearer to the New; but perchance the first news that will leak through into the broad, flapping American ear will be that the Princess Adelaide has the whooping cough. After all, the man whose horse trots a mile in a minute does not carry the most important messages."

What these passages suggest, it seems to me, is that with the earliest forms of industrial technology applied to communications there is a pronounced shift towards a space-biased culture, that is, to a social practice primarily interested in extremely rapid transmission of extremely simple information over great distances, and in comprehensive political administration of extended geographical territory. This space-binding and space-dominating culture is criticized by Thoreau because it is exploitative and also because it tends to obscure and finally annihilate communicative and social practice based on time, continuity, and balance, in short on norms other than those of the administrative state and industrial discipline.

"Men think that it is essential that the **Nation** have commerce, and export ice, and talk through a telegraph, and ride thirty miles an hour, without a doubt, whether **they** do or not; but whether we should live like baboons or like men, is a little uncertain. If we do not get out sleepers, and forge rails, and devote days and nights to the work, but go to tinkering upon our lives to improve them, who will build railroads? And if railroads are not built, how shall we get to heaven in season? But if we stay at home and mind our business, who will want railroads? We do not ride upon the railroad, it rides upon us. Did you ever think what those sleepers are that underlie the railroad? Each one is a man, an Irishman or a Yankee man. The rails are laid on them, and they are covered with sand, and the cars run smoothly over them. They are sound sleepers, I assure you."

For Thoreau the main objective of both reflection and of action is "to live like men (and women)" which means discovering worthy purposes to which one may appropriately allocate human time and energy. The operative values are those of human scale, direct social and political action and interaction, letting things be unless things really need changing. In Walden there are two primary images of durable, human, and natural continuity: First, there is Walden Pond itself, which represents the kind of organic wholeness to which Thoreau is personally

committed. There is also the image of "noble villages of men" - idealized versions of the small communities of Concord and Lexington. When Thoreau speaks of staying at home and minding our own business so that railroads will not be wanted, he is not speaking of some kind of seclusion within the private space of the middle-class home and the nuclear family, nor of a narrow-minded provincial isolation. The community he had in mind is self-sustaining though not necessarily self-sufficient; a cosmopolitan outlook is not excluded. However, time and space are primarily organized around the individual's human capacity to move around under his or her own power, and on the communicative skills of speech and writing un-improved by the space-dominating network of mechanical and magnetic technology.

We all know what has happened since Thoreau wrote, and we all know that it definitely has not been what Thoreau had in mind. The network of railroads and telegraph, and the accompanying technical and institutional infrastructure was in place in North America and in Europe well before the end of the nineteenth century. In Europe this space-binding and space-biased technology was superimposed on an already existing culture that was strongly time-biased and traditional in its orientation, with an extensive residual time-binding infrastructure of city street plans, architecture, and other durable monuments. There is a counter-tradition opposing industrialisation because of its social cost as well as its brutality; this tradition has been represented by figures like Blake, Dickens, Ruskin, and many others. In this counter-tradition it is understood that mechanical and electronic technology may eliminate old frustrations, and social obstacles to material abundance, but it is equally understood that industrialisation creates new and perhaps more destructive discomforts than those it eliminates.

It is clear that Thoreau understood the structural problems connected with the new space-binding technologies. Obviously he did not foresee the quality or the extent of the ecological devastation that would be brought about by these technologies. For Thoreau the "environment" could not ever have been a social or political "issue" - a narrowly defined problem on which men might reasonably take sides or seek compromise. The idea of a public inquiry that seeks to discover the proper position of moderation between too much acid rain and not enough would have been inconceivable to him. Nature was one of those things that have a self-evident right to be; a technology, on the other hand, is always questionable, and the question is whether such a technology has an equally self-evident right to be.

The space-binding network of railroad and telegraph has, of course, been enhanced and re-inforced by the even tighter networks created by the installation of telephones in the private home, and by the rapid distribution of the private car, roads to drive it on, and places to go in it. Since the Second World War this network has been further articulated by the broadcast

media, and the development of the interstate highway system and of the quite extraordinary infrastructure of motels and fast food restaurants that go with it. Thoreau's question whether Maine and Texas have anything worth communicating, has, it would appear, been answered. The success of this industrialization and technologizing of a widely and comprehensively extended communicative network does not, however, invalidate the critique first suggested in *Walden*. In fact, as that network invades and saturates more and more of both geographical and social space, and comes to administer more and more of our time and energy, it is perhaps worthwhile to take Thoreau's criticism very seriously.

Innis

In *The Bias of Communication*, Harold Innis has extended and developed a similar critique of modern communications technology, and in particular of the space-binding, centrally administered communicative practices of mass-distribution print and broadcast media. Innis articulated the central concepts of space and time-bias that I have been using in my analysis of Thoreau. Before proceeding to Innis' more specific analysis of these terms in the context of modern industrial society, I would like to quote his own definition.

"A medium of communication has an important influence on the dissemination of knowledge over space and over time... According to its characteristics it may be better suited to the dissemination of knowledge over time than over space, particularly if the medium is heavy and durable and not suited to transportation, or to the dissemination of knowledge over space than over time, particularly if the medium is light and easily transported."

As Innis makes clear, heavy, durable media - ideas literally carved in stone - correspond to societies with very great long-term stability, as in the ancient world, but with limited capacity to govern and administer widely dispersed territory. Lighter media, notably printed words on paper, and even more strikingly, radio and other electromagnetic phenomena, lend themselves much more readily to dissemination in space but are not well suited to preserving and maintaining cultural and social stability, at least in Innis' terms. The bias he finds in the media is not, however, some mysterious property of clay, or stone, or paper that inexplicably and yet inevitably brings about a change in each and every individual consciousness. The bias of a culture is embodied in institutions created by powerful groups that are able to make specific use of the available media, and which find the inherent bias of a particular technique especially well suited to the interests they perceive as desirable. As Innis and others have observed, the broadcast

media in particular are very well suited to comprehensive administration of time and energy over wide areas of geographical and social space. A particularly effective example of the administrative efficacy of the broadcast media is the familiar device of the clock-radio. The clock-radio, like a number of other communication media, is not really an instrument of communication so much as an instrument of surveillance that extends the social discipline of the industrial clock and the "work-week" into the private home, and helps us to bind ourselves even more tightly and irretrievably to the demands of that discipline. Innis suggests that this social discipline is neither natural nor inevitable; it is, however, very much a feature of industrialized societies and of the monopolies of knowledge that sustain them.

"... modern civilization dominated by machine industry is concerned always with specialization which might be described as always in excess... The concern with specialization and excess, making more and better mousetraps, precludes the possibilities of understanding a preceding civilization concerned with balance and proportion. Industrialism implies technology and the cutting of time into precise fragments suited to the needs of the engineer and the accountant. The inability to escape the demands of industrialism on time weakens the possibility of an appraisal of limitation and space. Constant changes in technology, particularly as they... affect communication... increase the difficulties of recognizing balance let alone achieving it. The cultural values of an industrial society are not the cultural values of other societies... The extreme sensitivity of modern civilization, for example, in the attitude towards cruelty to animals, and the extreme insensitivity toward unbelievable cruelty to human beings have synchronized with the complete collapse of spontaneous and unconscious artistic production... Each civilization has its own methods of suicide."

As Innis' work suggests, and as the rhetoric of the advertising confirms, micro-processing technology offers a greater acceleration and intensification of the schedules of industrial discipline, and an even more immediate, pervasive administrative surveillance of activity at a distance - even a considerable distance. More and more information can be moved over increasingly great distances at increasingly faster rates. Furthermore, orders from headquarters can be transmitted instantly to the lowest levels of activity within a corporate structure, and there is a high probability that they will be carried out unquestioningly because the tensions and ambiguities of face-to-face interaction, of speech and of presence, have all been eliminated. Whether or not this is to be regarded as an enhancement of social efficiency and social wealth, as good news in short, depends on what you take to be appropriate social and cultural ends.

Innis' own sympathy is with the values that inhere in the oral tradition and with political organization designed to human scale. Like Thoreau, Innis believed that men and women should be able to define their own goals and to pursue them under their own power. His social and cultural norms were "pedestrian" in the sense that he opposed the distortions of time and space introduced by high speed, mechanized transport and communication, and favoured instead those arrangements that made it possible to accomplish things on foot. He also favoured orality, as opposed to literacy, as central to the production and reproduction of knowledge.

"Creative thought (is) dependent on the oral tradition, (but) the conditions favourable to it (are) gradually disappearing with the increasing mechanization of knowledge... The printing press and the radio address the world instead of the (person). The oral dialectic is overwhelmingly significant where the subject matter is human action and feeling, and it is important in the discovery of new truth but of very little value in disseminating it. The oral discussion inherently involves personal contact and a consideration for the feelings of other, and it is in sharp contrast with the cruelty of mechanized communication and the tendencies we have come to note in the modern world."

Among those tendencies is the incessant demand for the mobilization of intellectual and reflective activity in the interests of the administrative state and its collateral institutions in the corporate sector.

"... pleas are made... that (educational institutions) are valuable because they keep the country safe from socialism, they help the farmers and industry, they help in measures of defence. Now of course they do no such thing and when such topics are mentioned you and I are able to detect the odour of dead fish. Culture is not concerned with these questions. It is designed to train the individual to decide how much information he needs and how little he needs, to give him a sense of balance and proportion, and to protect him from the fanatic who tells him that Canada will be lost to the Russians unless he knows more geography or more history or more economics or more science. Culture is concerned with the capacity of the individual to appraise problems in terms of space and time and with enabling him to take the proper steps at the right time."

In other words, the purpose of learning is to understand the relationship of ends and means, and to develop our ability to participate in the determination of appropriate human and social purpose.

Advocacy of the new technologies of word-processing and data-processing has not so far convinced me that it is prepared to address this type of critical question. The arguments have the familiar ring of all strategies based on the linking of a

menacing stick and an enticing carrot. The stick is, of course, expressed as the concern that if we do not conform to the demands of a computerized society we will be "left behind" in a state of obsolescence, eventual unemployment, and ultimate social and economic degradation. Although these arguments are usually presented as statistically-based projections or extrapolations, they are in fact nothing but a kind of coercive intimidation. On the other hand, we are told that if we choose progress over obsolescence we will be rewarded by greatly enhanced results, achieved more quickly and more efficiently. I find this promise just as questionable as the accompanying threat.

I share with Innis a sympathy for the value of the oral tradition and for communication on a human scale; I would add to this my own very great sympathy for the values of critical, reflective reading and critical, reflective writing. Two things are central to that cluster of experiences: it takes a long time, and it provokes discomfort. In my opinion it is the quality, the depth and texture of thinking and writing, that are most important, and this cannot be achieved without some real appreciation for the human energy and struggle that must be invested in the activity. The pressure of mechanization on the resources of human language and human creativity have been with us for a long time. Resistance to that pressure has been with us for just as long. The examples I have cited from Swift, from Thoreau, and from Innis suggest the range of forms that resistance can take.



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