FIRST SKIRMISHES IN THE GLOBAL STRUGGLE TO CONSTRUCT THE "SOCIAL BRAIN"

A Discussion Paper
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February, 1970

(An early draft of this paper was prepared as a commentary on several articles selected from a bibliography compiled by Prof. Herbert I. Schiller)

Reading the contemporary analytic literature on communications gives one the feeling of sitting on the front porch on a calm but muggy day--just before the hurricane strikes. It would seem that the inescapable conclusion to be drawn from these readings is that we are living in a time immediately preceding a "revolution" or social transformation of a kind and scale unprecedented in human history. Furthermore, it seems clear that a changing conception of ownership will play a keyrole in this transformation, simply because concepts of ownership very largely determine patterns of resource utilization whether the resource is land area in a city or the electromagnetic spectrum.

Perhaps the best way to appreciate the magnitude of the coming transformation is to recognize that mankind is just now beginning to construct a global "social brain". This term was used by John B. Calhoun at the December, 1969 AAAS meeting in Boston. It is a not uncommon observation, however, that societies, somewhat like individuals, learn from experience, project into the future, and make decisions. Of course societies have been doing these things for centuries, but technologies presently being developed will add enormously to the world's communications capabilities within the next few decades. Improvements in communications technology will make possible greater understanding of contemporary issues and of different cultures but also could further isolate groups with different views.[1]

By way of review, a few of these technologies are as follows:

1. UHF television has increased the number of channels available and thus made possible special audience programs.

2. Cable television presently has the capability of relaying at least twenty separate channels to a home connected to the system while also improving clarity of reception. The number of channels may eventually rise to fifty.[2]

3. Electronic video recording (EVR) will make possible the showing of programs at a time convenient to the viewer. Television tapes could be privately owned, adding a new dimension to home libraries.[3]

4. Communications satellites make possible world audiences for special programs and lower costs of television for less developed countries.

5. The idea of an information utility is being made a reality by companies such as RCA and AT&T.

6. Computer-based education equipment will make possible both private tutoring in the home and public participation in social planning.[4]

There is apprehension in many quarters, however, that these new technologies will be poorly used if not blatantly misused. The multifarious failings of the present media have been well catalogued by writers such as Nicholas Johnson and Nat Hentoff. However, the day to day criticism of media content has yet to become a widely practiced enterprise.[5] Michael Harrington has suggested that private corporations, which massively dominate the media in the United States, are by nature incapable of maximizing the social benefit of communications technology due to their emphasis on profits rather than the general welfare.[6]

Pessimism about the future of domestic and international communication is not the only note being rung. In his sixth annual report on the Communications Satellite Act of 1962, the President of the United States concluded,

> ...many opportunities are presented to the Nation in bringing the benefits of satellite communications to mankind. In meeting this challenge, the United States will continue to support the global commercial communications satellites system (Intelsat) which is available to all nations-large and small, developed and developing--on a nondiscriminatory basis. 7

However, some observers are as wary of self-professed American benevolence as Harrington is of the altruistic impulse in businessmen. For example, Herbert I. Schiller has written,

> Small enterprises in undeveloped economies competing against the industrial giants of the Western world may find freedom of trade something less than an unmixed blessing. Similarly, freedom of speech, viewed as the unrestrained opportunity for the dissemination of the messages of powerful American mass media in the world arena, threatens to swamp the feeble communications systems of the poor nations who comprise the vast majority of the global community. 8

FCC commissioner Johnson has described how the international operations of ITT could have influenced, both by implied policy and overt actions, the news content of ABC if the ITT-ABC merger had been approved.[9] But how does a large American broadcasting corporation take over the media in a smaller nation? It is instructive to consider the case of Latin America.

> By 1968 ABC controlled--directly or indirectly--sixty-four TV stations in twenty-seven countries, with an estimated audience of eighty million people.
>
> The system used by ABC to build its empire is a traditional one often used by imperialists. The company first invests in a certain local station. It begins offering material and technological services to the station, much as if it were one of its American affiliates. In truth, it has much to offer that is tempting: financial support, administrative or technical assistance, personnel training, canned programs and the network's commercial contacts.
>
> A Latin American station that affiliates with ABC must accept the programs and commercials chosen by ABC for its prime-time viewing hours. For example, ABC can sell Batman to a sponsor and then send the filmed series (with commercials included) to any location desired by the sponsor. Thus ABC has become a giant advertising agency, which does not need to distribute propaganda through any channels of communication other than those it owns. ABC has managed to create a unique worldwide medium, where a commercial sponsor may buy air time from a centralized source, and tailor his message according to his interests in each country. 10

But is this energetic use of Yankee ingenuity really so bad? Johnson's very persuasive arguments focus on the possible manipulation of the news in the interests of large international business concerns. In addition, the Latin American writer is concerned about the social and cultural messages disseminated among the populations of developing countries.

> The content of almost all these programs is meant to stupefy our people, to keep them within the imperialistic framework, to make them consumers. Most of the "villains" in North American films have Russian or Chinese names. Heroes are nearly always the prototype of the young North American marine.[11]

Obviously the problem of public control over and access to the communications media is not simply a domestic one.

If indeed the world is headed for a major social transformation, it is curious to note that social scientists, in particular political scientists, are not sounding a warning. On the contrary, they are proceeding as if they believe that future social systems will not be different in any significant respect from present social systems. Even those political scientists who advocate a radical change in the discipline and the political system rarely include communications in their list of "ominous trends worthy of note." In view of the considerable amount of communications literature available, it is puzzling why political scientists spend so much time studying classical institutions such as political parties and legislatures and so little time trying to invent new forms of government which take advantage of the new communications possibilities. In the absence of serious interdisciplinary social invention, the new media have been falling into the hands of enterprising ad men.

A few observations regarding political scientists may help to explain their disappointing lack of inventiveness.

1. Political scientists do not have a clear conception of what a social system is. The idea that politics involves the "authorative allocation of value" is not very helpful in understanding the present world. General systems theorists, on the other hand, regard a social system as consisting essentially of the flow of information (broadly conceived). Furthermore, for analytical purposes, human beings can be regarded as repositories of information which, in order to operate in the world, require "mental models" of how the world works. This view of a social system would lead political scientists to study information theory and artificial intelligence. By far the majority do not.

2. Most political scientists seem to believe that future social systems will tend to resemble present and past social systems; they assume that future data and past data are simply different samples from the same set of data. This notion is unlikely if not preposterous. To study different governmental systems they look across cultures rather than through time. Keeping up with current and projected developments in communications technology, which will alter the processing of information, is not considered an essential professional task. If, indeed, social systems change significantly over time, the theory of self-organizing systems would seem to be an essential part of a social science curriculum.[12] At present, it is not.

3. Political scientists do not seem to understand the difference between a science and a technology, between a natural phenomenon and a human artifact. Representative government, in my opinion, is most usefully

regarded as a social technology. It is not an ineluctable element in the physical-biological-social environment. The study of legislatures and political parties may be a useful occupation at present for a small group of people, but to study legislatures and political parties as instruments of government is like studying steam engines as instruments of vehicle locomotion. There needs to be more discussion of alternative forms. This observation is similar to the criticism of behavioral science which states that it tends to assume that the present status quo is somehow deserving of, or suitable for, scientific study. Studying how the existing system operates is quite different from trying to invent ways to change it in a desirable direction.

4. Another exercise which is useful for understanding how political scientists think, is to consider the set of all political decisions made in a society. For the sake of argument, this set of decisions can be divided into two parts--rational decisions and non-rational decisions. Rational decision-making could be defined as equivalent to Herbert Simon's idea of "optimising" behavior while non-rational decision-making would be Simon's idea of "satisficing" behavior.[13] Political scientists generally behave as though they are trying to predict the results of the present ratio of rational and non-rational decisions rather than developing methods which will expand the rational decisions to encompass a greater proportion of the total set. In terms of an analogy, say one has a number generator which is largely random. Rather than trying to change the algorithm to reduce the amount of randomness, political scientists seem to be trying to predict the largely random process as if it cannot be altered.

Not only the political scientists but even the media critics themselves have come up with few proposals to turn the new technologies to help the people rather than exploit them. Despite much eloquent criticism of existing methods, few of the authors on the reading list go into detail about the alternatives they would prefer. Adolf Berle concludes an article on corporate power with these remarks.

> Increasingly the choice is between planning done by non-responsible individuals employed by private institutions and planning done by some publicly responsible group which can indicate the objectives for which economic power should be used and the line of direction it should take to achieve them.
>
> Obviously any such system is just as good as the ideas and the strength of the body politic behind it. In the hands of a totalitarian dictator, the system could produce terrible oppression. In the hands of statesmen, it could vastly liberate men. We are really seeking a body of doctrine, eventually to be reflected in appropriate institutions, that will control economic power. As men think, so they are. 14

Surely an experienced social observer can design a system of government less subject to capture and use by a tyrant. It would seem that Berle should be sent back to his drawing board until he can come up with a planning institution containing internal checks and balances which operate in the public interest. In his article on the social-industrial complex, Michael Harrington, another noted social critic, comes closest to a specific proposal in his closing exhortation.

> America must build new institutions of democratic planning which can make the uneconomic, commercially wasteful, and humane decisions about education and urban living which this society so desperately needs. 15

Hentoff's discussion on bringing democracy to America likewise does not use an information theory approach in a conscious effort of institutional design.[16] He merely suggests it is technically feasible for people to use cable television to communicate with each other as they would with

a fancy sort of telephone. Though he is concerned with local governance, he does not see government as a problem in communications subject to technological change even when he is detailing the high impedance to information flow from citizens to public officials.

But despite misguided scientists and not very innovative critics, there is a glimmer of hope. The idea that government is a social technology subject to modification rather than an autonomous phenomenon to be studied as it exists is the basic assumption made by the growing number of people interested in "policy science." Dror has suggested that "meta-policy--policy on how to make policies"[17] --is an integral part of this field of study. The essential short-coming of our present forms of government, Dror notes, is that they respond either to incremental change or to "shock-instigated erratic jumps" but there is "no capacity for innovations in policy which are simultaneously farreaching, comprehensive, and rationally-based."[18] If political scientists are concerned with this problem, it has not been evident from reading their journals in recent years. However, there are beginning to be rumblings about a "post-behavioral movement."[19] Mankind will probably forgive this terminology if it turns into a politically potent movement to direct the social transformation wrought by communications technology in the direction of public access to the media and involvement of the public in social planning.

FOOTNOTES

1. Ithiel de Sola Pool, "Social Trends," International Science and Technology, April, 1968, pp. 87-101.

2. Nat Hentoff, "Participatory Television," Evergreen, Volume 13, Number 71, October, 1969, page 54.

3. Nicholas Johnson, "The Public Interest and Public Broadcasting: Looking at Communications as a Whole," Washington University Law Quarterly, Fall, 1967.

4. Stuart Umpleby, "Citizen Sampling Simulations: A Method for Involving the Public in Social Planning," December, 1969, 25 pages.

5. Nat Hentoff, "Students as Media Critics: A New Course," Evergreen, Volume 13, Number 72, November, 1969, pp. 53-55.

6. Michael Harrington, "The Social-Industrial Complex," Harper's, November, 1967.

7. "Message from the President of the United States Transmitting the Sixth Annual Report on Activities and Accomplishments Under the Communications Satellite Act of 1962," U.S. Government Printing Office, Washington, January 23, 1969, page 13.

8. Herbert I. Schiller, "The Use of American Power in the Post-Colonial World," The Massachusetts Review, Volume 9, Number 4, Autumn, 1968, page 635.

9. Nicholas Johnson, "The Media Barons and the Public Interest: An FCC Commissioner's Warning," The Atlantic, June, 1968, pp. 43-51.

10. Maximo Humbert, "ABC-TV Has Just Bought Latin America: Stay Tuned for Further Developments," translated from Analisis, Santiago Chile, reprinted in Atlas, January 1970, page 38.

11. Ibid., p. 39.

12. W. Ross Ashby, "Principles of the Self-Organizing System," Modern Systems Research for the Behavioral Scientist, edited by Walter Buckley, Chicago: Aldine Publishing Co., 1968, pp. 109-118.

13. Herbert Simon, Models of Man, New York: John Wiley and Sons, 1957, page 261.

14. Adolf A. Berle, "Second Edition/Corporate Power," The Center Magazine, Volume II, Number 1, January, 1969, page 84.

15. Harrington, Op. Cit.

16. Nat Hentoff, "On Bringing Democracy to America," Evergreen, August, 1969, pp. 46-47, 75-76.

17. Yehezkel Dror, "Technological Forecasting and Policymaking Reform," Technological Forecasting, Volume 1 (1969) p. 111.

18. Ibid., p. 110.

19. David Easton, "The New Revolution in Political Science," The American Political Science Review, Vol. LXIII, No. 4, December, 1969, pp. 1051-1061.