The appearance of such a work on what can only be described as "contemporary history" raises some questions for users of sources at the Public Archives of Canada and of Canadian government departmental records housed, for example, within External Affairs and the Department of National Defence. In other words, can the run-of-the-mill, ordinary, researcher expect similar access to such material before it is declassified? Can he or she examine it, with special permission, before declassification? Or must be or she request it be declassified first — hoping against hope that his or her wishes will be granted? Despite the usually excellent cooperation given to ordinary researchers, there is an understandable tendency to be cautious with requests for classified material, be it, say, twenty-five years old or younger. In many ways the "good stuff" will elude the researcher and only surface when the time is considered safe and appropriate. Perhaps it just has to be this way, particularly if one is dealing with more than his or her own government's actions. To do otherwise could very well alienate a foreign government and, theoretically, lead to a reticence on its part to share information. Morrison was in an enviable position. He was part of the search team; he worked for the Directorate of History; and most importantly he knew the people to know. This, plus the possibility that the epic of Operation Morning Light could provide some well-deserved credit and publicity for the Canadian military and cast a shadow on the Soviets, meant that documents which might have remained classified were allowed, after some vetting, to see the light of day. One cannot be certain that the average researcher would receive such attention. even though those in charge of such records may attempt to be accommodating. It is a recurring problem for the researcher, one that will doubtless not go away, especially in matters of military and external policy, both of which will likely continue to be safeguarded by the careful provisions of the new Access to Information and Privacy Acts.

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Technologies of Freedom. ITHIEL de SOLA POOL. Cambridge, Mass.: Harvard University Press, 1983, 291 p. ISBN 0-674-87232-0.

In most democratic societies, communications policy analysts generally reject the extreme positions of rigid government control and administrative laissez-faire in favour of a middle-of-the-road approach to the relationship between the mass media and the state. Between the extremities there still remains a wide range of available options. In Canada the public presence is significantly greater than in the United States which has weaker regulatory agencies, an absence of supportive programmes for indigenous publishing, and lack of publicly-owned broadcasting facilities. But the assumption in both countries has long been that some kind of system of countervailing forces is necessary to keep the channels of communication reasonably honest and open. Constitutional protection, competitive markets, the law of libel, press councils, freedom of information provisions, mixed systems of ownership, and regulatory agencies are among the many mechanisms that have been used by democracies to try to keep propaganda or mass manipulation in its many forms to a minimum.

Recently, however, the strategy of countervailing forces has been drastically altered, if not entirely abandoned, by a number of analysts in favor of a policy of allowing market forces to predominate through deregulation of the media. It is an indication of the growing strength of this movement that its ranks have now been joined by Ithiel de Sola Pool, one of America's leading scholars in the burgeoning field of mass communications. Regulation, Pool affirms unequivocably (p. 246) in *Technologies of Freedom*, should be "a last recourse. In a free society, the burden of proof is for the least possible regulation of communication." For Pool, therefore, the most desirable relationship between the government and the media is that which has existed in the sphere of print where the First Amendment's guarantee of freedom of the press has operated as an effective bulwark against regulation.

While obviously critical of how other areas of communication such as the postal service, the telegraph, and broadcasting have been subjected to government regulation during the course of American history, it was not simply Pool's perception of supposed regulatory abuses of the past that led him to write Technologies of Freedom; rather it was also his anticipation of the future on the basis of certain current trends in communications technology. Several years ago, he suggested that one of the most significant developments in the field of communications is the convergence or interlocking of the various mechanisms for assembling and delivering information. In Technologies of Freedom, this theme is treated in considerable detail. Pool shows how the electronification of the media is rapidly breaking down traditional distinctions between print media, common carriers, and broadcasting. For Pool, this is cause both for rejoicing and alarm. The development of videodiscs, teletext, and so forth offers the potential of greatly enhanced communication within society, but at the same time it threatens to bring previously unregulated forms of expression within the jurisdiction of regulated channels of communication. It is thus thought to constitute a grave danger for freedom of the press unless the apparent penchant for regulation in America is curtailed.

It is a measure of Pool's vast erudition that *Technologies of Freedom* is likely to be considered as indispensable reading even by communications scholars and policy analysts who find themselves in fundamental disagreement with its main line of argument. The work raises the history of communication in America to a new level of sophistication and provides valuable insights into the puzzling array of new communications technologies. Having said that, however, it must also be added that it contains a number of major and disturbing blind spots. When one compares Technologies of Freedom with Eric Barnouw's recently updated three-volume A History of Broadcasting in America (1966-70), the abuses of the Federal Communications Commission with its relatively modest mandate seem slight in comparison with the lack of responsibility frequently displayed by privately-owned broadcasting organizations dominated by commercial considerations. Pool quite rightly stresses the need for a diversity of voices in a democratic society, but he neglects to tell us, for example, how the weakly regulated private broadcasters effectively eliminated those interests that wanted to use part of the radio spectrum for non-commercial educational programming. Moreover, it is not because of the FCC, but primarily because of the commercial basis of broadcasting, that "full, robust citizen participation in a democratic forum casts only a shadow on the tube." (p. 108) Certainly, Pool's seemingly unbounded faith in the natural disposition of unregulated

communications conglomerates to serve the public interest is quite misplaced in the light of studies such as Armand Mattelart's *Multinational Corporations and the Control of Culture* (1979).

Pool's work is valuable not only for communications policy analysts who need to keep an open mind on the so-called Information Revolution, but also for archivists who need to be aware of how the surviving traces of human communication are likely to change in the coming decades. But his general prescription is ill-suited to cure Canada's communications ills. Pool does not acknowledge the possibility that one can have a strong belief in freedom of the press and yet still believe quite logically in the necessity of public participation in the process of determining the nature of our communications environment. He more or less equates freedom of the press with the absence of regulation and assumes that this is a prerequisite for the unrestrained progress of communications technology. Were Canadians to adopt any such philosophy, they would, in effect, be relinquishing control not simply to private enterprise, but to American communications interests.

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A Calculating People: The Spread of Numeracy in Early America. PATRICIA CLINE COHEN. Chicago: University of Chicago Press, 1982. 271 p. ISBN 0-226-11283-7 \$22.50.

Statistics are such an integral part of information that some effort is required to note that they have not always been so. Patricia Cline Cohen easily overcomes that problem in her study of the development and spread of arithmetical skills and statistical knowledge in the United States between the seventeenth and midnineteenth centuries. Cohen follows the history of "numeracy" through the creation of the British censuses of America, collection of mortality and disease statistics in New England, development of early education in arithmetic, and the federal government's acquisition of statistical information through the first decennial census. She concentrates on how statistics used in the formulation of public policy affected perceptions of social reality. Cohen begins with a discussion of the rising use of statistical measurement in the seventeenth century to define the physical world. Accurate measurement of physical phenomena enabled science to reveal that the laws of physics and biology governed a world once considered the exclusive realm of divine will. In the early 1760s, British "numerists" like Sir William Petty, a navigator, mathematician, and former Surveyor General of Ireland, suggested that statistics could bring the same scientific objectivity to social and political problems. In Political Arithmetick, Petty argued that information grounded in "Number, Weight, and Measure" would end futile conflicts fueled by the "Mutable Minds, Opinions, Appetites and Passions of particular Men." This fatally simple idea inspired many numerists.

Cohen reaches her most interesting conclusions in the chapters on the social and philosophical impact of numeracy. In her discussion of mortality statistics collected in New England during the eighteenth century, she notes a fundamental shift in perceptions of health problems. Numerists discovered trends in their statistics which