TELECOMMISSION

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Report on the Seminar on Telecommunications and Participation

The Department of Communications

TELECOMMISSION REPORT 6 (a)

Report on the Seminar

on

Telecommunications and Participation at

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TABLE OF CONTENTS

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This Report is to be considered as a background working paper and no effort has been made to edit it for uniformity of terminology with other studies.

REPORT OF THE SEMINAR ON TELECOMMUNICATIONS AND PARTICIPATION

INTRODUCTION

"Technology can give society just about what it wants. But what does society want? It is up to you to tell us." That impassioned plea came from an engineer at the three-day seminar on Telecommunications and participation. Held at the University of Montreal, the seminar was attended by some 70 communications experts, academics, businessman, public servants and private citizens.[1]

The objective of the meeting was: "To consider ways by which telecommunications technology and systems can be developed so as to increase the opportunities for participation by individuals, groups and institutions ....(and) to propose guidelines for the development of telecommunications so as to increase the opportunities for participation." Within that broad context, two propositions were stated as being taken for granted-though both in fact were at times questioned: (1) "That increasing participation in the decision-making process by groups and individuals is both desirable and inevitable," and (2) "That telecommunications technology can be developed so as to increase the opportunities for participation."

Panel discussions were organized on the following topics: Political Aspects; Social Processes; Participation through the Mass Media and Techniques for Creative Participation - that is, participation

(1) By disciplines those present comprised: political scientists, 6; sociologists, 7; computer specialists, 6; psychologists, 2; engineers, 6; lawyers, 4; broadcasters, 9; journalists, 6; filmmakers, 2; educators, 4; others, 10. By languages the breakdown was 23 francophones and 39 anglophones of whom 13 (and all francophones) were bilingual.

by citizens with access to the actual instruments of communication. Following the panel discussions the gathering divided into small workshops. Each workshop produced a report on its deliberations for general discussion at the final plenary session.

The report is divided into three chapters. The first describes the Seminar as a whole, including the principal points made by panelists and other speakers, key questions and comments and the workshop discussions and reports. Chapter Two is a summary of those position papers which, as requested, were prepared in advance (2), and Chapter Three reports the conclusions of the meeting.

A multi-disciplinary seminar, particularly one covering as much ground as "telecommunications and participation", is an untidy process -- appropriate for generating ideas rather than reaching decisions. The engineer quoted earlier never did receive the specific guidelines he demanded, but his question nonetheless generated a spirited debate, and many interesting suggestions. This report at times imposes a more logical order upon the discussions than may actually have existed amid the polemic and confrontation; elsewhere it is unBowdlerized, on the gounds that at times confrontation carries its own logic.

(2) A complete list of panelists and of position papers together with the terms of reference for the Seminar are contained in Appendix A.

CHAPTER ONE

The Haves and The Have Nots

Optimists & Pessimits

In a big city, a lost soul searches in the telephone book for a number, calls a specially-manned Suicide Center -- and perhaps a life is saved. In the distant Lac Saint Jean - Saguenay region of Quebec, miners and pulp workers and housewives get up early or stay up late to watch educational TV broadcasts -- and are brought into a world they could never otherwise have entered. In Pond Inlet on Baffin Island, Eskimos operate their own radio station with an old 20-watt transmitter -- and give their community a collective voice.

All these are examples of telecommunications used as a tool for citizen participation. So also are radio 'open-line' shows which bring public figures into debate with ordinary citizens, and cable television systems whose spare channel capacity gives community groups and institutions a chance to air programs that would never otherwise have been broadcast.

At the present time, some of the key elements of communications technology - film, videotape and audio equipment - are becoming progressively cheaper, easier to operate and accessible to more and more people. Each year thousands of students learn the fundamentals of broadcasting and film-making, and are initiated into the mysteries of data-processing. From cameras to computers, the new tools of communication are becoming as commonplace to the young as the telephone, the typewriter and the television set are to the present generation.

The process has barely begun. National computer networks promise, eventually, instant information for the asking. In the "wired city" of the future, the individual will be able to summon up or send programs and information as required. On the surface, the possibilities for increased individual participation and fulfillment seem boundless. And yet - the power of information technology to change

our social, political and cultural environment does not necessarily mean change for the better. This power is just as capable of stifling as it is of fulfilling the rising demand for mass participation.

As they discussed the inherent possibilities for good and ill, people attending the Seminar could be divided roughly into optimists and pessimists: or those who believed that information technology can be exploited to serve social needs, and those who felt that the technology is too powerful for effective political or social controls, and may ultimately harm society. Although individual speakers often swung between the two points of view, the basic conflict persisted throughout the meeting, producing both a lively clash of ideas and, at times, open confrontation.

From the outset, there was open disagreement over the potential relationship between telecommunications and participation. The optimistic view, in the words of one sociologist, was that telecommunications could create "a kind of Jeffersonian democracy based on social and political participation," if it were properly used. On the other hand, the keynote speaker, Alan Westin of Columbia University, argued that the reality of telecommunications is quite the opposite from its apparent promise. "Information technology", he said, "as an inevitable function of its complexity and cost, reinforces those who already hold power" - big government, big corporations, big unions, big churches and big universities.

Léon Dion of Laval saw the same dangers as Westin, only more starkly. Information technology "accentuates the predominance of the government over the legislature, the bureacracy and the judiciary.

It amplifies the power of speech, and encourages politicans to hide in the secrecy of technicalities."

According to the pessimists, the much-heralded data banks may prove to be a very mixed blessing, creating a "dossier society," in which a man is judged on his print-out instead of his person. Information affluence could in fact lead to "information pollution", causing ordinary citizens to flee from the flood of data, images and sounds, and to abandon government to an elite which alone knows how to exploit the power of the new technology - a "regime of the demago-technocratic type", in Dion's words. And even if no charismatic technocrats emerge, can society withstand the "future shock", or psychic disturbance, to which it is subjected by incessant changes introduced by the new technology of information?

On a somewhat different level, the pessimists at the seminar were given proof that technology, at times, fails to work as expected. In a dynamic demonstration staged by Jean Cloutier of the Aduio-Visual Center, University of Montreal, Seminar participants were divided into three groups (anglophone, francophone and bilingual) and linked by two-way, audio-visual communications systems. Most found the experience more frustrating than exhilarating -- and revealing, simply because it was frustrating.(1)

Quite apart from the frustrations of that experience, an anti-technology mood was detectable at the seminar. One participant, in fact, declared his conviction that the meeting had been organized as a soft-sell attempt to co-opt intellectuals into helping to peddle

(1) An audio-visual report on this experience is in preparation.

technology. "I am not going to be party to any scheme by bureaucrats to shore up their rotting empires", he announced. At the other extreme a businessman listened to a series of attacks on technology and then exploded: "You are nothing but a bunch of kooks tossing out way-out ideas that are humiliating to industry."

A Nation of Equals

Telecommunications can be defined easily and precisely - it means communicating at a distance. But defining participation is more difficult. Sociologist Arnold Rockman saw participation as "the sending of messages through communications networks", and wanted to know who is sending these messages, and who should be. Political scientist Leon Dion drew a distinction between participation through "integration", which telecommunications tend to favour in liberal societies where "the objective is to mobilize various publics through commercial and political advertising and through public affairs programs", participation through "delegation", characteristic of representative democracies; and participation through "commitment", or the full contribution of all the members of a society, in all their diversity. This last was the kind of participation which telecommunications should be fostering.

According to one workshop report, if there is a cost to participation, it is "nothing to the cost of failing to permit participation". The alternative was a society increasingly divided into participating "haves" and alienated "have nots". The goal must be to use telecommunications systems to permit citizen participation on a scale unequalled since Ancient Greece and Pioneer New England.

"A nation composed of equals and near-equals in full communication with one another across the whole land can be nothing other than the strongest kind of society imaginable", said Rockman. And according to Donald Snowden, Director of Extension, Memorial University, Newfoundland, "a nation which does not continuously involve the collective intelligence and experience of its citizens as a deliberate act of policy in shaping the destiny of the country, is a nation with an especially regrettable dimension of poverty."

Telecommunications have not only multiplied the opportunities for participation, but they have increased the demand, to the extent that "Say's Law" is operating, and supply is manufacturing demand. At the same time, the abundant supply of information systems creates "rising frustrations", said Dale Thomson, a political scientist at Johns Hopkins University. They "make available new concepts, alternative ways of life. They erode established patterns and values. They create new demands without satisfying them, and lead to dissatisfaction ... to social and political unrest, social and political mobilization."

The march inspired by communications systems, according to Dion, is leading toward a "political revolution which could engender a new civilization ... a new humanism". The telemedia, or mass media which distribute their messages by means of telecommunications, have "taken a place among the most powerful instruments of socialization ... propagating the values of the post-modern era." The telemedia, even if owned by the old, "are produced for the young, if not by them ... Television in particular, neglects adults and ignores the old," who

until now were the ones who determined the culture, particularly the political culture, of our society. Today, because of telecommunications, the young have taken their place.

In Dion's view, "the immense spiritual thirst of our contemporaries will not be satisfied by books". Instead, "an audio-visual civilization is being substituted before our eyes for the civilization of the book."

Overwhelmingly, participants agreed with these descriptions of the unexpected and unplanned impact of information technology. As keynote speaker Alan Westin commented: "we have always taught our children the institutional structures --- the President, the police, the mailman --- and it is only later that they came to understand the human ingredient and its conflicts". Television has reversed this process, and glorified the individual in conflict. The media, unconsciously, "are teaching our children that all institutions are bad."

Quite apart from its accidental, environmental effects, however, telecommunications technology can be deliberately applied to produce social change and political development. Snowden described community development projects in rural Newfoundland and Alaska where film and video-tape had given a voice and an awareness to people who never had them before. Vincent Ross, Director-General of Planning for the Quebec Department of Education, described the impact of the Tévec adult education program, which used television and computer 'sense-a-mark' cards in the Lac Saint Jean-Saguenay region. And radio 'open line' shows across Canada provide a different kind of opportunity for public involvement.

"It is one thing to write a letter to the Editor complaining about City Council", observed John Craine, Director of Radio, CBC, "It is another thing to debate that matter with a City Councillor before several thousand witnesses on the air."

Many other possibilities suggested at the seminar included hot-line phones by which citizens could communicate directly with officials, and computerized referendums on public issues. Soucy Gagné of Sorécom proposed televised debates between public figures, with the watching public being sampled in mid-debate - although a computer scientist advised that "instant" sampling of large numbers of people would present immense technical difficulties.

Today cable systems, with their potential for delivering 40 or 50 television channels into a single home, represent perhaps the most dramatic aspect of the new technology. Charles Templeton, Vice-President of CTV, saw cable systems becoming "virtually a utility ... proliferating the number of available channels, intensifying local programming and increasing the participation of the general public in broadcasting", both as recipients of minority - appeal programs and as program originators through local and community "educational, political, ethnic, theatrical and service organizations". Robert Russel of Orba Information took the selectivity of cable systems one step further by arguing in favour of "demand programming", by which individuals could call up films and video-tapes of their own choice.

Loss of Concensus

According to Alan Westin, "the key question is the redistribution of power", and many people present felt this could be best achieved by

decentralizing communications technology - by "demand programming", by community involvement in cable television, by "citizens band" television, by do-it-yourself radio stations operated entirely by local groups, like those in the ghettoes of New York. A parallel approach would be mass education of the public in the techniques of communications systems, in order to create "a nation of producers". The technology must be "de-mystified", said Jean Cloutier of the University of Montreal.

But what would be the end result of this decentralizing process? What would happen to the "common experiences, common symbols, common norms", upon with society is built, as political scientist Peter Regenstreif reminded the group. "In the world of one-station for one-listener, do we reduce the feeling of community which comes from shared experience?", asked Craine. "The generation that will gain influence in the '80s will probably not mourn the disappearance of this mass experience. Instead, do they see a world of city states with highly decentralized forms of government? All connected in isolation?"

But how much decentralization of this kind could a nation such as Canada afford? On the one hand Soucy Gagné urged "multiplying the centers of production in order to take account of regional differences. On the other hand, Roy Faibish of Bushnell Television warned that the rapid increase in local programming made possible by cable systems would distract peoples' attention from national issues and enhance the power of local governments at the expense of the central government. "A national cable-TV network is a necessity if this country is to survive", he declared.

Sociologist Arnold Rockman appeared to be of two minds on this subject. On the one hand he maintained that "concensus does not mean that everybody in a social group agrees about everything. It does imply that members of social groups have acquired empathy ... the ability to imagine the role of others, to imagine what it feels like to be somebody else and to do what he does." He was supported in this view by Donald Snowden, who had found that Newfoundland fishermen could relate directly to films about Mexican-American grape workers in California, and vice versa.

But, despite his interpretation of the meaning of concensus, Rockman nevertheless deplored the fact that "our regional and linguistic groups now seem much stronger than our total Canadian identity. At a time when we should have been protectionist, isolationist and high tariff in our national communications policies, we practiced an unmindful doctrine of laissez-faire". And he attacked the mass importation of U.S. television programs as "little more than a subliminal psychic invasion which constitutes a colonial domination in many respects more repressive than the types of imperialism known before the rise of the electronic mass media".

Yet, paradoxically, the increase in the inflow of U.S. television programs had coincided with an increase in Canadian nationalism. It seemed as if the more one knew about someone else the less one liked him. Within Canada itself, "the friction between the two linguistic groups", argued Dale Thomson, "may well be the result of 'good' rather than 'poor' communications." There is great danger, as well as great promise, in the fact that Canadians are being made aware

of one another, in all their diversity, as never before. In Rockman's terms this danger and/or promise could be understood as a clash between the "being" values of French-speaking Canada and the "doing-becoming" values of Anglo-American culture. "French-Canadian society wishes to have a complete, fully recognized identity among the group of modern industrial societies (which are largely dominated by Anglo-American 'doing-becoming' and technological-utilitarian empiricism) without losing its own earlier cultural identity based on 'being' values".

The Trojan Horse

As the seminar progressed, it was pointed out by many people that participation means more than the ultimate in self-expression. It is a vital part of the total political process, and far from being a mechanical act. Ultimately, it depends upon the political will of a society, and not upon telecommunications. At present, the poor have no "right" to participate, in the sense of using communications facilities, although they have the right of access to other public services.

There is a much current talk of "feed-back" from the people to their government, but the concept is an empty one unless the "right to be heard" is accompanied by the right to have action taken on the opinions expressed. Participation, warned Vincent Ross, could be a "Trojan Horse": governments might indulge in participation to pacify the public, but they would discover they had taken into the system a force which would ultimately transform the power structure.

Participation might change politics, agreed Regenstreif, but not at all in the ways that its supporters fondly imagined. "The proponents of mass direct participation will (eventually) wish they

had never advocated any such thing", he warned, and touched off some of the most intense arguments of the Seminar.

In England, for example, a Gallup Poll showed that a majority of the public favoured re-establishing the death penalty, although the people's representatives in Parliament continued to support its abolition. If the will of the public was ignored, what was the point of asking for it? And if it was always accepted what was the point of electing leaders to make decisions?

"A supposed new age of participatory democracy is dawning", commented Regenstreif. But, "mass public can only react. Providing effective channels for mass participation is simply a useful device to check on the operation of policy. Innovation is still the responsibility of elites."

Moreover, new channels would in reality benefit those who needed them least. "The elderly, the poor, the less-educated, are so unaccustomed to dealing with government", said Regenstreif, they would neglect the new opportunities. If free telephone calls to Ottawa were made available, people who now pay to telephone officials would continue to call, only much more frequently because of the free service.

Rockman was no adherent to this view. Without access to all the contemporary communications tools, public participation would always be limited, he maintained. "No doubt the guilds of medieval scribes also objected to the pernicious idea that larger numbers of people should be taught to read and write." He also found it impossible to agree with Regenstreif's contention that increasing the flow of information "may serve to narcotize rather than energize the

average listener, viewer, reader. The more time spent listening, reading and viewing, the less time available for organized action. And the average citizen can easily mistake the fact that he knows a great deal, with doing something about it."

The debate between these two, the one a sociologist and the other a political scientist, was never resolved. And after two days of discussions, the seminar at large was no closer to unanimous agreement than before the meeting started, although perhaps there was much greater awareness of the complex nature of the communications revolution, and its effects on society.

In an attempt at reassurance, Charles Templeton pointed out that "even those who work at the heart of the industry have no definitive understanding of its ramifications with society Yet many people were aware that there is precious little time left to discover those ramifications. "The systems for the next 20 years are already on the drawing boards", warned Don Chisholm of Northern Electric. For good or ill, those systems will create their own demands, and shape their own environment, and we will have lost the chance "to create a benign technology."

At the final plenary session, some participants argued that what was needed was a moratorium on the introduction of new technologies --- satellites, video-phones, data banks, home video recorder/playback machines --- until their environmental effects could be determined, and appropriate measures taken, if necessary. The proposal found little support. Instead, many emphasized the need for full scale, inter-

disciplinary research, conducted perhaps by some kind of communications institute, simulating new systems before they were applied and monitoring them once in place. One participant suggested that what was needed was market research to uncover real and latent demands for new communications services.

When the social scientists present were pressed to "tell us what you want so we can design systems to meet those needs", one sociologist explained: "We do not know the answers. We have only just started to ask these questions." This comment drew the tart rejoinder that "you are all no more than liberals terrified by the overwhelming nature of communications technology. You ask on endless series of solemn questions, then you shake your heads and pretend that you don't have enough information to try to reply."

As for a conclusion to all the discussions, that of Dion probably came closest to the consensus of the Seminar: communications, its hardware and its software, "will either be the grave-diggers of our civilization, or the creators of a new one."

CHAPTER TWO

The Arguments:

The New Technology

To aid those at the Seminar unfamiliar with all the ramifications of the new information technology, three technical background papers were presented. In addition, Kar Liang of the National Film Board gave a multi-media demonstration of the new systems' applications.

Dr. R.A. Mason, IBM Canada. Computers have the capacity to effect "great changes in the manner and degree of participation of individuals in our society -- whether in the political process; in planning our social environment; or in enhancing people's creativity in their work and their increasing leisure time."

The great speed with which computers calculate increases "our ability as humans to understand the consequences of proposed courses of action." If large numbers of people are to have access to computerized systems, "the importance of terminal prices ... is paramount." Now available are "video-display consoles, including controller and magnetic tape memory units, which rent for about $40 per month. A portable keyboard-audio terminal costing $26 a month allows a computer equipped with an audio-response device to answer keyed inquiries in English or French. Many other inexpensive terminals are available, including the touch-tone telephone itself. "One speculative direction for the future is direct communication between the individual and the computer from his home telephone. Another future approach would provide neighbourhood centers with perhaps more sophisticated terminals."

A specific example of the use of computers to extend the decision-making process is that of "the simulation of processes and phenomena. By constructing a mathematical representation of a system and having a computer experiment with this 'model' it is possible to predict new phenomena or to uncover facts about the mechanisms of the system which could not be discovered in any other way." The Urban Systems Simulation

Laboratory of the Washington Centre for Metropolitan Studies has developed a special gaming room for playing the Community Land Use Game, in which players are intended to learn awareness of inter-relationships in urban systems.

The concept of computer-calculated referendums is certainly attractive: "It evokes the possible return to the democratic societies of ancient Greece." But today's problems are incomparably more complex, and "our society would be radically altered if all of us had to continuously consider the detailed problems of controlling our society." Moreover, a referendum on a single public issue would be a massive undertaking. Using a central computer able to handle 300 simultaneous calls from touch-tone telephones, it would take five hours to register the votes of 100,000 people, many of whom would have to wait two or three hours to get a connection.

R.J. Latham, Bell Canada Ltd. The telephone is probably the "major mode" of participation today. It permits two people to "share a common acoustical space" even though they may be thousands of miles apart. A telephone subscriber in Canada, or elsewhere, can share this common space with any of the 214.4 million phone subscribers in the world.

Among practical examples of participation by telephone are radio open line programs. In some large cities, Suicide Centres are accessible by phone. The telephone is also used to access information contained in recorded announcements, ranging from weather reports, news and "dial-a-prayer", to university course material. Sir

George Williams University has a system which gives students access to taped language courses, by telephoning the library.

Further developments include multi-party connections, mobile phones and the video-phone with a two-way video-screen $5\frac{1}{2}$ x 5 inches which "should be available in the mid 70s in Canada." A two-way, broadband, video-link between universities in Boston and Montreal is being planned and Bell Canada is examining the possibility of a two-way, audio-visual link between Montreal and Toronto using a conference room able to hold about nine people in each city.

Teletypewriters use telephone lines, and so do facsimile transmission machines, at which there are about 500 now operating in Canada. Entirely new fields are being opened up by the linkage of computers and telecommunications. As communication increases between all parts of Canada the bilingual nature of the country becomes increasingly important. "At some future time it will no doubt be possible to have translation done by automatic means on telephone calls - say using computers called in by either party."

Dr. John de Mercado, Department of Communications. The future "Wired City" will be a city with a total communications system, "where total is used to imply that the number of services that the system could provide is limited only by the imagination and pocket-book of the subscriber" -- and not by the available technology.

This "wired city", using a switched coaxial cable system to provide a range of audio-visual-data services, might become feasible within 15 years; a pilot, fully-wired, urban project could be

possible within five to six years. Among services which might be provided are: facsimile,, meter-reading, shopping from the home; demand television; computer aided instructions; video-phone; electronic banking; high-speed communication between subscribers and computers.

The key problem is cost, "which tends to increase exponentially as a function of the number of services." A prototype wired city network would cost approximately three times that of the existing, separate, telephone and cable-TV networks.

The Politics of Participation

Dale C. Thomson, Johns Hopkins University. Communications has burst through the barriers of the traditional academic disciplines. "It is inconceivable, for example, to study communications and politics seriously without some competence in sociology, psychology, linguistics, mathematics, computer science, anthropology, and some of the natural sciences including biology, ecology and physics."

"We live in an ubiquitous, elastic and global communications system ... It is convenient to think of human society as a vast and intricate network, with countless messages pulsating through it. In other words, a complex and dynamic process."

"David Easton has conceived a model of the polity as an input-out system, with interactions both within the society and with the environment about it. The notion of feedback that he uses has entered into common parlance. Examined from this point of view, the decision-making process can be seen as an information flow, with inflow, perception assessment, recommendation and application as various stages." A government must be pre-occupied with every stage in this process ---

obtaining the necessary information to make decisions, assessing that information accurately, assuring the right informational output, and adequate feedback.

The use a government makes of the communications network depends on its knowledge of the subject, and also on the political "colour" of that government. A totalitarian government will try to control the channels and to direct the information flow. The flow will likely be largely outward from the center of political power. A more democratic government will have a larger inflow than outflow in terms of the quantity of messages. Certainly it will have a much more complicated network.

"It seems to be a temptation for politicians to try to control the number and nature of communication channels. Information Canada is such a case. So is the proposal for a domestic communications satellite. It is not for nothing that the Canadian and Quebec governments are fighting for authority over the communications channels." But although governments can and do affect the communication pattern, there are "national" limits to their ability to do so.

The challenge to an agency such as the Department of Communications "is to know how much it can, and should influence the communications pattern in the national interest." The Department is bound to be "headed by busy men and my personal concern is that they will not have the time or facilities to understand the communications process in Canada. Research is essential, and "I would appeal to the Minister not to neglect this aspect of his Department's activities. Communications is a new field of research, and much remains to be

discovered about it. Many of the questions ... remain unexplored. In fact many of the questions remain unasked."

New communications systems transform the social and political environment about them, leading to "social and political unrest, social and political mobilization." Faced with such a situation, the wise political leader rushes to modernize the communications system, and to see that its channels extend to every sector of the national community. The wise democratic leader will try to ensure that the communications flow is in both directions."

"It is tempting to apply these general observations to the current political scene in Canada, and with special reference to Quebec. That is a first class subject for research ... (and) a fruitful one for Canadians."

Peter Regenstreif, Rochester University. "A supposed new age of participatory democracy is dawning ...(a) political Age of Aquarius." There is no doubt that the media technology--television, radio, print, telephone, computers--can permit greater participation in decision-making and greater contact between leaders and public. However, "there are considerable grounds for doubting whether even with the full development of the new technology, the role of the public will be that different from what it is today."

A clear distinction should be made between the availability of new technology and its actual use. Government departments have made almost no use of existing survey research methods which, though expensive, are "ultimately nowhere near as expensive as not knowing the information obtained through such techniques." Members of Parl-

iament still refuse to allow proceedings in the House of Commons to be televised. "No special provisions have been made--nor scarcely have they been suggested--for providing Canadians free phones to their MP; even the mails are not fully used." Few Canadians know that they are entitled to free mailing privileges when writing to their government in Ottawa.

The new technology is expensive, and that limits its use. It is also complicated, and that serves as a further restriction. "Direct phone links to government require specialized directions for their use, and this would automatically reduce the number of people able to use them. If the calls were recorded by some computerized device, the only gain would be in the relative ease with which the original and subsequent calls from the public could be made in contrast to writing. Anyway, the odds are that bureaucracies cannot function without writing."

Regenstreif's doubts about the number of people who would take advantage of new channels for participation were recorded in Chapter One, and so were his suspicions that the result of participation in public issues might be quite the opposite of what many advocates of mass involvement expect.

Because of his belief that "one of the strongest underpinnings of a political system is some sense of political community", Regenstreif said "it is possible still to be wary of proliferating channels of communication." They may meet "individualistic criteria but they also counter a need in society for common experience."

"A related problem area is something Paul Lazarfeld and Robert Merton termed 'Narcotizing Dysfunction'", which again was described in Chapter One. "I believe this is what has happened here in Montreal among English-Canadians in connection with the problem of relations with French-Canadians."

In conclusion, "I do not regard increased public participation as a panacea." It cannot be assumed that the use of various technologies, like the phone, television, and survey research, will necessarily result in better participation. New channels will, however, give the public a chance to react to policies initiated, as always, by small, powerful groups.

Prof. Léon Dion, Laval University. "Telecommunications comprise only an aspect, and perhaps a secondary aspect, of communications. The most remarkable consequence of the 'communications revolution' of the past fifty years has been, not the substitution of the traditional--interpersonal--style of communications but the addition to it of telecommunications, which thereby has incomparably increased the weight of the former type of communications."

Professor Dion's analysis of the different kinds of participation was reported in Chapter One. Telecommunications must be made to serve "participation through commitment", and for this to happen, the "scandalous under-exploitation" of the social possibilities of telecommunications needs urgent attention. "The real question is whether liberal societies are prepared to convert the media of communications into essential, socio-political instruments."

Of all the factors contributing to change during the past century, the advent of the telemedia has probably been the most powerful in transforming the traditional universe of man. "The notions of distance, of geographic space, of social and psychological norms have acquired new meanings ....It is probable that as a result of this new environment even the foundations of personality will undergo profound mutations."

As described in Chapter One, Professor Dion felt that telecommunications accentuate the power of government in a democracy, and "it is far from certain that steps such as televising parliamentary debates or legal proceedings would re-establish a certain equilibrium." Powerful as they are, the telemedia affect different segments of the population in different ways. For old people, television seems to be mainly "a soporific", which shortens the time spent waiting for death. For the young, on the other hand, "the telemedia represent a veritable school"; records, radio and television are as natural a form of education as the family and the school were for preceding generations.

The gap between young and old in the modern world does not imply a "conflict of generations. It is first of all attributable to the fact that a new humanism, if not a new humanity, which supercedes all traditional values, is in the process of being born."

The phenomenon of dissent appears to be attributable in large measure to telecommunications, "to the extent that they incite and crystalize a revolution of rising frustrations - a possible prelude to a political revolution which could create a new civilization."

Our social responsibility is so great that "all countries and the United Nations itself" should immediately decree the entire field of communications to be a "problem of global proportions." If we do not "resolve the crisis of humanism created in large measure by the telemedia, all our efforts will be without purpose and all our discussions will be idle verbiage."

The Social Implications of Participation

Arnold Rockman, York University. As described in Chapter One, Rockman defined participation as the sending of messages through society's communications networks, and expressed concerned about the message senders.

"Since the mass media are organized like industries", people who appear on radio or television, or put data into a computer network, are expected to have certain professional qualifications - unlike the people who merely "receive" messages. Even higher qualifications are required of those individuals who "organize" the message output.

Message senders and organizers are essentially middle-class people, propagating a middle-class style of life. "Large numbers of people who might organize or send interesting and important messages into media networks never get a chance to do so."

The identity of those who organize or send messages is particularly important in the case of our mass media which Rockman said are largely filled with American-produced programs reflecting American middle-class values. "The media situation in Canada at present is little more than a subliminal psychic invasion .....

The new imperialism works through Bonanza and soft drink commercials, through situation comedies, through melodramas, through space operas, all of which are so skillfully devised (in a technical sense) that hardly any governments realize what the total effects on their societies are likely to be in the next 50 years."

Rockman's concern for our Canadian identity was described in Chapter One. "Given the present situation of Canadian mass media it is often far easier for many Canadians to generate empathy for people in the US or in Nigeria."

Violent acts are often the media of communication chosen by people who feel all other legitimate channels have been blocked. "It is an arguable thesis that most anglophones in Canada paid little attention to French Canadian claims for recognition of their full identity until the bomb exploded in the Montreal mail box. "Before that happened, how often were French-Canadians seen and heard on English-Canadian radio and television? And when they did appear were they presented as equals, or as "charming holdouts of a bygone rural tradition?."

With this background, certain specific proposals can be made:

a) "In a 'doing-becoming' society such as ours, strong personal identities are developed through action and through a sense of increasingly effective 'reach' ...We have hardly begun to consider the possibilities of a society in which more and more people, regardless of income, age, class and other social variables, are able to discover their individuality and personal identity through free exploration of the symbolic environment."

Experimental projects could include putting very young children in charge of remote-controlled cameras and switching devices for the selection of broadcast images. Or children could be allowed to "edit their own newspaper through the use of computer-controlled typewriters, screens and loudspeakers in a game-playing situation."

b) We are used to the idea of living in a "liberal society" in which most people can read and write. But "electronic literacy", or the ability to 'read' images and sound is now widespread; most people should learn to 'write' electronically as well. "Why not establish a 'citizens' band" of television studios across the country, where anyone may present or produce his own videotape program for subsequent broadcast, locally or nationally? Remote control studios might be necessary for economic reasons.

c) "As cities continue to sprawl across outdated political boundaries ...we may need creative experiment and research in the use of broadcast media organizations for the development of community loyalty, participation and social organization at the neighbourhood and district level... which might help to counteract growing feelings of isolation and political powerlessness now everywhere experienced in industrial urban mass societies."

d) We ought to consider these possibilities if we want a \'nation of producers'\ of message-senders, a society

in which maximum individuality of expression is encouraged. "We may need a federal government-sponsored communications research institute which would be action research-oriented along these lines."

e) The current method of financing the media needs radical revision. One possibility would be a "tax on all advertising messages, no matter in what medium they appear."

"The political and social implications of these proposals (may) lead to a widespread decentralization of power (and) a nation composed of equals and potential equals in full communication with one another across the whole land."

Donald Snowden, Memorial University. "Society makes tragically poor use of the human resources available to it." Much indifference, hostility, abrasion and polarization exist because there do not appear to be adequate opportunities for citizens to participate meaningfully in decisions which affect their lives."

"Those decisions concern how and where people live." Fightening evidence exists that centralization has become the standard by which "the dimension of life in Canada is measured." But this standard "is not compatible with the retention of values and traditions which are still meaningful and important to many Canadians who live outside the centers of influence in this country."

Participation by rural people is not necessarily more urgent than that by city dwellers. Yet "rural people are convinced that they

are more remote from centres of influence, from centers of communication, decision-making and manipulation." They feel that expensive development and remedial programs for rural Canada are being implemented on their behalf, without any opportunity for their "meaningful participation" in the planning process.

The tools are now available to make participation a reality. "But it is one of the anomalies of Canadian life that what the Department of Communications regards as tools for participation may very well be regarded as weapons by other agencies who recommend policies and formulate and administer programs for Canadians. Their record in seeking or giving the appearance of welcoming participation is not formidable."

Film is one of the tools of communication which has been used to encourage citizen participation. It was first used in a joint program by the National Film Board and Memorial University, on Fogo Island, a small and economically-depressed island with some 4,000 inhabitants. "The technique involves filming an overview of the community, as it sees itself, (centering) around personalities and not around issues, ...Every individual on film has first editing rights and can in fact refuse to allow all or any of the film to be used after he views it." The completed films are then shown throughout the community, and after approval there they are screened elsewhere, in particular "to those in positions of power."

On a number of occasions, these films appear to have helped cause positive action both from outside the community and from within, because they reveal points of common concern and frequently

the first steps towards solution. One practical result, on Fogo Island, has been the creation of the first co-operative ship building yard in the province.

A somewhat similar project, using video-tape, took place in Alaska. Before the introduction of rural development legislation, video-tapes describing the proprosed laws were shown in rural Alaskan communities. Subsequent discussions of the proposals were in turn video-taped and viewed by the legislators. As a further extension of this approach, a proposal has been made to equip each of 200 Alaskan villages with video-tape equipment so that citizens can make and exchange their own programs, for educational purposes.

The experiments in Alaska should be introduced to the Canadian north, which suffers from the same "debilitating effect of lack of communications." But "participation means nothing if those who participate are not well equipped to do so", and to date "there has been appallingly little effort by governments to equip their citizens to work in fruitful partnership with the policymakers, planners and technocrats."

Vincent Ross, Quebec Department of Education. Tévec was a 48-week, Quebec government experiment in audio-visual education. Initiated in June, 1968, its main objective was to teach certain basic subjects, up to the ninth grade, to the adult population of Saguenay-Lac Saint Jean. At the same time, the program was designed to "stimulate the adult population to take part in the changes in social development and to sentitize it to the realities of modern life." In short, Tévec aimed "to transform attitudes and broaden the spirit."

Tévec offered daily and weekly television programs. It also provided the necessary background material. "Sense-a-Mark" computer cards were used for testing responses to questions and also for research purposes. In addition, regional and local consultative committees for "animation and participation" were formed. Tele-clubs were organized to hold discussions following the weekly programs, and revision Centres were set up, where individuals could make personal contact with teachers.

"Participation is not an effect produced mechanically" by communicating with a previously inert public. "On the contrary, it occurs as an active element at the very moment of message reception and selective exposure to the media ...." A communications organization which intends to educate a heterogeneous public in a specific region must first of all mobilize the public, that is incite it to modify its routine activities sufficiently to enable the public to integrate itself into the new activity."

To mobilize the public in Saguenay-Lac Saint Jean, a public campaign using radio and TV was undertaken before the first educational broadcast. This procedure demonstrated the "two-step" nature of communications. The publicity itself "did not directly provoke adults into registering with Tévec. On the contrary, the decision whether or not to register was made after an 'informal' process of consultation, discussion and negotiation with all those people in the students immediate circle "who felt deeply involved in the merits of his decision or its possible consequences." In this process, "the socio-metric leaders (or Opinion leaders) seemed to play key,

mediating roles. This "two-step" operation continued through the Tévec experiment, with those following the course relying upon friends and neighbours for advice and encouragement to continue."

A number of conclusions can be drawn from the success of Tévec and from the general experience gained:

1) "It is important to explore further all aspects of the process of mobilizing various publics: telecommunications, decentralized organization, amplification and censorship within the immediate social milieu .... etc."

2) Multi-media systems incorporating a feedback process appear to have certain advantages in mobilizing and maintaining public participation in "serious" programming. For possible future application, researchers should examine the implications of feedback patterns that are more or less "instantaneous" or "deferred."

3) A program such as Tévec involves changes in the daily routine of those participating in the courses, since the programs were seen very early in the morning or very late in the evening. "It is important that research programs be undertaken to better understand the nature and degree of the changes in daily routine required."

4) "It will be necessary to undertake follow-up research to determine, quantitatively and qualitatively,

the long-term effect of participation stimulated by multi-media systems, and in particular its implications for broader socio-cultural and political processes."

Participation through the Mass Media

Soucy Gagné, Sorécom. The question is no longer whether participation is a good thing or not, but how to invent ways to make it more effective.

"If I adhere to the notion of enabling more groups and individuals to participate in community affairs by means of the mass media then, on the other hand, I place enough confidence in human beings to believe that they will use the media in a functional manner, and on the other hand I believe in the worth of the action of the mass media (as instruments of initiation, of reinforcement, of change, and even of catharsis); at the same time I am convinced that the mass media have been, far more than is necessary, under the control of a small minority who have used them to reinforce their privileged positions."

While it is a fact that more people than ever before are expressing their opinions through the mass media, this participation "takes place within a structure which does not search for participation as a democratic end in itself." Because television and radio stations operate on a commercial basis "they have had to invent a certain type of participation." A long list could be compiled of people who have been denied the right to express themselves through the mass media. In effect, "it is necessary to have money to exercise one's right of expression, one's right to be heard."

The increasing number of cable-TV systems will give various groups a better chance to express themselves on subjects of their choice. Small program production centres will encourage the development of local identity "in such a way as to increase the opportunities for a more intense participation in all its forms at the regional level."

"The co-ordinated exploitation of technical systems such as the telephone, radio, television and computers will bring a new dimension to the possibilities of participation, not only for small groups but for all the community." During a televised debate on a public issue, a representative sample of the population could take part in a computerized referendum, creating a wider participation, and contributing greatly to the quality of public debate.

The growth of citizen participation and increasingly easy access to telecommunications equipment are both inevitable. But we should be making preparations for the future. "It seems obvious to me that education and broadcasting techniques are so inter-dependent that we shall soon have to find coherent methods for progressively introducing these media into the entire learning process."

John Craine, Canadian Broadcasting Corporation. Broadcasting is moving into an era of "technical affluence". Audiences are being fragmented, and "the concept of mass audience will have to be redefined."

The growth of CATV systems is causing changes in television which have already occurred in radio. Listeners in Los Angeles now

have a choice of 108 stations and New Yorkers have 63. "Radio programmers have all but abandoned the attempt to be all things to all men and have instead sought to identify a specific area of interest thatis sizeable enough to attract a viable minority", a pattern which resembles the increasing specialization of magazines.

"Since most people believe that a wide range of alternatives contributes to the quality of life, we can look forward to a further extension of this trend." But perhaps "we lose something in the process. In the world of one-station-for-one-listener, do we reduce the feeling of community which can come from the shared experience?"

Radio has also led television into the era of two-way communication. About 100 Canadian radio stations operate introducing shows. While the quality varies widely, there is no doubt that these programs have given the average listener a two-way form of communications unlike any other so far invented. "In situations where literacy is a problem, the Phone-In show offers perhaps the only effective means of expression to thousands of people who simply could not compose a letter".

Yet, open-line shows have their limitations: "most have been generated at the community level and seem most effective in dealing with local issues, such as berating the Town Council for poor snow removal. It remains to be seen if this form of broadcasting can offer the listener participation in broader issues."

An even more exciting development is that of "do-it-yourself radio". At Pond Inlet on Baffin Island the local Eskimo community runs its own programs on an old 20-watt transmitter given them by the CBC. Last winter a group of young Ojibway people in northwestern Ontario started a project called Kenomadiwin, using radio as a means of community development. More and more Canadian universities run their own student radio stations, on low-power or closed-circuit. In big city ghettos in the United States, local groups are set up with small transmitters in abandoned store-fronts, broadcasting within their own block, with encouragement by the Corporation for Public Broadcasting.

"We must begin to train a new breed of activist listeners ... Young people in the school system should be taught the simple technicalities of making their views known in the mass media. Above all they should be educated to criticise. Given basic information about broadcasting --- its limits, its capabilities --- they should be trained to demand only the best that it can produce."

Charles Templeton CTV Ltd. "Of the major technologies television is the youngest; it may also be the most consequential. For good or ill,.. it directly touches more lives than any single invention man has devised." Yet almost nothing is known about its social effects.

"The industry is in a state of flux, and the forces influencing both technology and programming are greater than at any time since its inception...automated recording and playback equipment

in the home will make possible an electronic library with all the advantages of constant availability. World-wide, universal colour and scanning line standardization are inevitable. Three dimensional, wallsize receiving sets are no longer mere science-fiction imaginings. "CATV will become virtually a utility, improving picture reception, proliferating the number of available channels, intensifying local programming and increasing the participation of the general public in broadcasting\." There can be little doubt that a "third network", a CATV consortium, will develop in Canada.

"Actuality programming will increase enormously. Television cameras will be able to go wherever man can go." The long-delayed great leap forward in educational television will provide enrichment programming as well as instruction. It will help replace "the creativity and satisfaction" which the average man previously derived from his work. There will be an increase in "escape" programming, which helps "to relieve accumulated tension", and also a larger role for news, informational and public affairs television.

A new kind of programming will emerge through the growth of cable television. Events and individuals not presently covered by public or commercial television "will become daily program fare for minority audiences." Whenever cable operators have sought their co-operation, "educational, political, ethnic, theatrical and service organizations have demonstrated an immediate readiness to commit themselves to participate in planning and in actual programming."

CHAPTER THREE

Conclusions

As the first in the series, the Montreal seminar at times wandered away from its objectives into polemic and dialetic. Nevertheless, several clear-cut themes emerged.

This is the "age of communications". The combination of media and information technology is challenging inherited values, institutions and power structures, and may even alter "the foundations of personality." The phenomenon of participation, or the desire by larger and larger numbers of citizens to participate in the making of decisions which affect their lives, is one of the principal products of this explosive and largely untrammeled force. It has been caused both by the "revolution of rising frustrations" and by the incomparably greater opportunities for direct participation created by the new technology.

At the same time, participation is no instant panacea. It may even be a liberal, middle-class notion foisted upon the entire nation. Too much participation could lead to a collapse of consensus, with everybody "connected in isolation" while busily doing their own thing.

As technology fragments the media, more attention can be paid to specialized audiences. This process is already taking place in radio and will, through cable systems, take place in television. Local and community identity will be reinforced, and as a result the region will grow in power in relation to the Canadian federal government. To

some participants this seemed a problem, but others emphasized the need for regional distinctions.

Data banks and demand television and EVR-type home video machines may be the ultimate in individual media. But citizens must also be able to participate creatively. As one workshop report put it: "What we should be working towards is a situation in which the right to send a message via the media, as opposed to simply having the right to receive a message, is accepted as a legal right."

This leads to the concept of "a nation of producers," as several participants called it. Specific suggestions included do-it-yourself radio stations manned by community groups and a "citizens band" chain of TV studios where any individual could record messages for broadcast.

The key to effective participation is know-how; without it, the media will remain the preserve of an elite. Technology should be "de-mystified" and the public instructed in its use. If it is correct that "the civilization of the book is dying before our eyes", or at any rate declining and making way for a possible new audio-visual civilization, then literacy may have to be re-defined as the ability to read and write, in sound or in moving images.

Before ringing in all the marvels of the new technology, full use should be made of the instruments we already have, including such homely services as the mails, which citizens can use without charge when communicating with their government. Instead of designing

systems for computer referenda government should use the already available techniques of social science research. And rather than encouraging mass participation, one workshop suggested "use the channels we already have--the political parties--and give members access to all the information technology."

The need for more research was a recurrent theme in most workshop discussions. Multi-disciplinary research, involving a full partnership of social and natural sciences, was taken for granted as the only meaningful approach. Several participants advocated the creation of some type of research center or institute. There were few specific proposals for research projects, apart from a suggested study of attitude changes brought about by the media, and by radio hot-line shows in particular.

Two more or less random comments can serve as conclusions.

One participant proposed: "The Department of Communications should fire half its engineers and hire social scientists instead."

Another participant tried to get a sociologist to provide specific answers to his question "what social objectives should we technicians aim for", and when none were forthcoming, observed: "If you don't tell the systems designer now what's needed, 15 years from now you'll blame him--and then it'll be too late for him, or you, to do anything about it."

APPENDIX A

Seminar Chairman: R. Gwyn, Department of Communications

Guest Speaker: Alan Westin, Columbia University

Plenary Session Chairman: G. Beaugrand-Champagne

Panellists:

1. Technical Briefing

G. Bergeron, Department of Communications (Chairman)
R. Latham, TCTS*
K. Liang, National Film Board
R. Mason, IBM Canada*
J. de Mercado, Department of Communications*

2. Politics of Participation

D. Thomson, Johns Hopkins University (Chairman)*
Léon Dion, Laval University*
R. Faibish, Bushnell TV*
P. Regenstreif, Rochester University*

3. Social Processes of Participation

G. Beaugrand-Champagne (Chairman)
A. Rockman, York University*
Vincent Ross, Ministere de l'Education, Quebec*
Don Snowden, Memorial University*

4. Participation through the Mass Media

A. Ouimet, Telesat Canada (Chairman)
J. Craine, CBC*
Soucy Gagné, Sorécom*
C. Templeton, CTV*

5. Techniques for Creative Participation

J. Cloutier, The University of Montreal (Chairman)
A. Rockman York University
Louis Martin (animateur)

Workshop Chairman: Alex Murray, York University; R. Monpetit, NRC;
D. Hilton, de Montigny Marchand,
Department of Communications.

* Position paper available on request.

TERMS OF REFERENCE

To examine the ways by which telecommunications technology and systems can be used to increase participation by individuals and groups, both in the sense of making a contribution to decision making and as a means for creative self-expression.