Public debate over communication policy has been one of the dominant themes of Canadian social discourse since the early days of radio broadcasting. Communication, in Canada, has been seen variously as a binding force for national unity, as a vehicle for social development, and as an instrument of cultural affirmation. In contradiction with these overriding themes, policy has also sought to promote the development of Canadian communication industries. In this respect, more so than in Europe or the United States, where one or the other pole has conventionally dominated, communication in Canada has evolved according to the push and pull of the tension between economics and culture (1).

The Canadian debate on the new information infrastructure, launched within weeks of President Clinton's announcement in 1993 of the US NII, has settled firmly into this historical mould. This paper will explore the various

(*) This article is based on a paper presented to the National and International Initiatives for Information Infrastructure symposium, John F. Kennedy School of Government, Harvard University, 25-27 January 1996.

facets of that debate with this historical backdrop in mind, suggesting that the Canadian approach can be seen as a model for attempts to marry non-market public policy objectives and market forces, with all their pitfalls, in the framework of a stable democracy with a relatively robust economy (1).

The development of a Canadian NII, it will be argued, can not only respond to technological or geopolitical imperatives, but is also contingent on the extent to which the new initiatives correspond to a social demand. The question of how best to meet sociocultural objectives is part of the political equation of communications infrastructure development - or regulatory repositioning - in Canada, a country with a tradition of state intervention to promote an indigenous market and an indigenous culture.

General Background

The unfolding of the national infrastructure debate in Canada raises a number of public policy issues which will have to be faced by most of the advanced industrial nations.

Because of its historic tradition of policy intervention in culture and communication, Canada has an established set of institutional practices for policy-making which may be particularly appropriate for addressing national infrastructure issues in a variety of settings.

Among these particularities are the principle that communication infrastructures constitute a cornerstone of national cultural heritage, that the main instrument for realising cultural and communication policy is a mixed system of publicly owned and publicly regulated public and private industries, and that the participation of social groups is a central part of the policymaking process.

Structurally, the Canadian NII debate has to be seen in the context of two pieces of legislation, the Broadcasting Act (2) and the Telecommunications Act (3), and with respect to the activity of the agency charged with supervising and regulating both broadcasting and telecommunications under the scope of these two laws, the Canadian Radio-Television and Telecommunications Commission.

(1) For comparative purposes, see MANSELL (1993). The Canadian situation resembles what MANSELL calls a "strategic evolutionary model", as opposed to one characterized by unregulated full competition.
The Broadcasting Act, first adopted in 1932 and last revised in 1991, is by far the more complex and elaborate of the two, and gives some indication of the general tone of the debate. By virtue of this legislation, all broadcasting in Canada is declared to be "a public service essential to the maintenance and enhancement of national identity and cultural sovereignty" (1). Canadian broadcasting is deemed to be a single system comprising public, private and community elements. It is to be effectively owned and controlled by Canadians, is to make maximum use of Canadian creative and other resources, and is to serve the needs and interests and reflect the circumstances and aspirations, of Canadian men, women and children. These circumstances include equal rights, linguistic duality (English and French), the multicultural and multiracial nature of Canadian society, as well as the special place of aboriginal peoples within that society. The Act creates a publicly-owned national broadcasting service, the Canadian Broadcasting Corporation, with a detailed mandate, and provides for other public services in such areas as educational broadcasting (which falls under provincial jurisdiction). In the event of conflicting interest between public and private sector elements of the system, the objectives of the public sector are supposed to prevail. Overseeing and implementing all of this is an independent public authority for the regulation and supervision of the Canadian broadcasting system, the CRTC (GRANT, 1991).

The Telecommunications Act, adopted in 1993, starts from a similar position, declaring that "telecommunications performs an essential role in the maintenance of Canada's identity and sovereignty" (2) and lists as the objectives of Canadian telecommunications policy to facilitate the orderly development of a telecommunications system that serves to safeguard, enrich and strengthen the social and economic fabric of Canada and its regions, to render reliable and affordable services of high quality accessible to Canadians, to enhance the efficiency and national and international competitiveness of Canadian telecommunications, to promote the ownership and control of Canadian carriers by Canadians as well as the use of Canadian transmission facilities, to foster increased reliance on market forces while ensuring regulation where required, to respond to the social and economic requirements of users and to contribute to the protection of privacy of persons. The telecommunications sector, since 1976, is also regulated by the CRTC.

(1) Statutes of Canada, Broadcasting Act, art. 3.
(2) Statutes of Canada, Broadcasting Act, art. 7.
Legislative rhetoric aside, it is important to understand the scope of the industries concerned (see Table 1), the objectives of the government in their regard, and public expectations.

### Table 1 - Top Canadian Telephone, Broadcasting and Cable Companies (by revenue, CAN $, 1994)

<table>
<thead>
<tr>
<th>Company</th>
<th>Revenue</th>
<th>Principal activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell Canada</td>
<td>$8,066,200,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Anglo-Canadian Telephone</td>
<td>2,565,400,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>BC Telecom</td>
<td>2,319,600,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>BC Tel</td>
<td>2,020,900,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Rogers Communications Inc.</td>
<td>1,482,755,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Telus Corp.</td>
<td>1,387,345,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Canadian Broadcasting Cor.</td>
<td>1,329,410,000</td>
<td>Broadcasting (*)</td>
</tr>
<tr>
<td>Le Groupe Vidéotron Ltée</td>
<td>646,340,000</td>
<td>Cable</td>
</tr>
<tr>
<td>Sask. Telecomm'n's</td>
<td>629,070,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Manitoba Telephone System</td>
<td>551,264,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Maritime Tel. and Tel. Co.</td>
<td>550,049,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>WIC Western Intl Comms Ltd.</td>
<td>393,028,000</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>Bruncor</td>
<td>377,658,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>New Brunswick Telephone Co.</td>
<td>359,314,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Edmonton Telephones</td>
<td>311,766,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>NewTel Enterprises</td>
<td>297,086,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Shaw Communications</td>
<td>288,789,000</td>
<td>Cable</td>
</tr>
<tr>
<td>CanWest Global Comms</td>
<td>273,396,000</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>Newfoundland Telephone Co.</td>
<td>263,727,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Québec-Téléphone</td>
<td>254,316,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>Baton Broadcasting</td>
<td>253,346,000</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>Standard Broadcasting Corp.</td>
<td>239,560,000</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>CHUM Ltd.</td>
<td>202,585,000</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>Cogeco Inc.</td>
<td>194,612,000</td>
<td>Cable</td>
</tr>
<tr>
<td>Télébec Ltée</td>
<td>183,226,000</td>
<td>Telephone</td>
</tr>
<tr>
<td>CFCF Inc.</td>
<td>175,642,000</td>
<td>Broadcasting</td>
</tr>
</tbody>
</table>

*Includes parliamentary grant of $955,000,000


The central feature of the Canadian broadcasting system is its public-private mixed ownership structure. The publicly-owned Canadian Broadcasting Corporation operates national AM and FM radio networks, over-the-air television networks, and 24-hour cable news services in English and in French, providing service into even the most remote northern regions of the land. It is funded about 75% by an annual grant from Parliament and the balance from television advertising (the cable
news services are self-financed by cable revenues). After a decade of struggling with a progressively shrinking public subsidy, the future financial basis of the CBC was high on the national agenda following a major review of its mandate by a blue-ribbon committee which reported in January 1996 (1). But it was still by far the largest single broadcaster, with an operating budget of around $1.3 billion CAN in 1994 (see Table 2).

Table 2 - The Canadian Television Economy

<table>
<thead>
<tr>
<th>Public spending on television in Canada</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ottawa</strong></td>
<td></td>
</tr>
<tr>
<td>Can. Broadcasting Corp:</td>
<td>985m</td>
</tr>
<tr>
<td>Telefilm Canada:</td>
<td>95m</td>
</tr>
</tbody>
</table>
| National Film Board:                   | 66m     | (based on est. that 80% of NFB production ends up on tv)
| **Subtotal:**                          | 1,146m  |
| **Provinces**                          |         |
| Educational tv:                        | 230m    |
| **TOTAL:**                             | 1,376m  |

Television commercial revenue in Canada

<table>
<thead>
<tr>
<th>Advertising</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CBC:</td>
<td>299m (1994)</td>
</tr>
<tr>
<td>Private tv:</td>
<td>1,341m</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td>1,640m</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td>3,811m</td>
</tr>
</tbody>
</table>

Economy of Canadian television, 1994

| Public funding:                  | 1,376m  |
| Advertising:                     | 1,640m  |
| Cable subscription:              | 2,171m  |
| **TOTAL:**                       | 5,187m  |

CBC, 1993-94

| Spending on operations:          |         |
| Television:                      | 1,032m  |
| Radio:                           | 325m    |
| **Revenue:**                     |         |
| Parliament:                      | 955m    |
| TV advertising:                  | 299m    |
| Other (cable fees, etc):         | 75m     |

Sources: CBC, Telefilm, and NFB Annual Reports for 1994; Statistics Canada, "Radio and television broadcasting 1992" (cat. no. 56-204) and "Cable television 1993" (cat. no. 56-205); Association for Tele-Education in Canada, Creating Access to Tele-Education (ATEC, Burnaby 1993).

(1) Canada Mandate Review Committee, 1996. The committee recommended that CBC be funded by a "communications tax" on cable and long-distance telephone revenues, instead of the current mixture of advertising and parliamentary subsidy.
Private sector radio and television operate competitively wherever market conditions allow, and are entirely advertising-funded. Canada is one of the most highly-cabled countries in the world, with a subscriber rate approaching 80% of total households, and the cable industry has been at the cutting edge of broadcasting development since the 1970s. More than a dozen Canadian specialty television services are currently available for cable companies to offer, in packages structured by regulatory requirement to ensure priority delivery of Canadian signals and a favourable balance of Canadian and US subscription services. As a matter of course, Canadian cable companies offer the main American network signals from bordering US stations as part of their basic package. At the time of writing, the CRTC had just licensed two Canadian satellite services, which hoped to break into the cable-dominated market (see Table 3).

Table 3 - Where a Canadian's Television Dollar Goes (Our compilation)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public expenditure as percentage of overall economy of television</td>
<td>27%</td>
</tr>
<tr>
<td>Average annual expenditure of a cabled household for basic service</td>
<td>300 $</td>
</tr>
<tr>
<td>Average annual expenditure by advertisers per television household</td>
<td>200 $</td>
</tr>
<tr>
<td>Average annual public expenditure per household for CBC television</td>
<td>123 $</td>
</tr>
<tr>
<td>Average annual public expenditure per household for Canadian television production via Telefilm</td>
<td>12 $</td>
</tr>
<tr>
<td>Average annual public expenditure per household for NFB production destined for television</td>
<td>8 $</td>
</tr>
<tr>
<td>Average annual public expenditure per Ontario household for TVOntario</td>
<td>36 $</td>
</tr>
</tbody>
</table>

Sources: CBC, Telefilm, and NFB Annual Reports for 1994; Statistics Canada, "Radio and television broadcasting 1992" (cat. no. 56-204) and "Cable television 1993" (cat. no. 56-205); Association for Tele-Education in Canada, Creating Access to Tele-Education (ATEC, Burnaby 1993).

The particular nature of Canadian broadcasting is underscored by a number of other features: the Broadcast Program Development Fund administered by Telefilm Canada, a federal crown corporation which subsidizes independent television production destined for broadcast by both public and private sector broadcasters; the availability of a substantial inventory of Canadian documentary and feature films produced by the National Film Board of Canada; educational television broadcasters operated on a public service basis by provincial government agencies in several provinces; and a range of community radio and television services funded by various sources and organized to serve specific communities ranging from northern native settlements to urban college campuses.
In telecommunications, the market is characterized by a small number of dominant players, most of them grouped in a partnership known as the Stentor Alliance. By far the most important of these is Bell Canada, a subsidiary of Canada's largest industrial corporation, Bell Canada Enterprises. Until a Supreme Court decision in 1994 ruled that the federal government (and consequently, its agency, the CRTC) had exclusive jurisdiction over telecommunications, regulatory authority was split, with the CRTC regulating the activities of "national" companies like Bell and some provinces regulating the activities of companies operating exclusively on their territory. In terms of gross revenue, the telecommunications sector is roughly 8.5 times the size of the broadcasting and cable industries.

The current regulatory framework for telecommunications was established by a landmark CRTC decision known as "Telecom Decision 1994-19", announced in September 1994 (CRTC, 1994). This decision introduced full competition in telecommunications markets, including local telephone service (long-distance competition had been introduced in June 1992), and began the process of removing regulatory barriers to the provision of image-based information services by telephone companies. In principle, telephone companies, cable companies and wireless service providers can all now offer voice, data, and video telecommunications services to local subscribers. In fact, cable companies have been lobbying for a moratorium on actual implementation of the new framework, and it is still unclear how the CRTC would respond to a telephone company application for a broadcasting license. In short, there is still some way to go before regulatory theory is confirmed in practice.

Obviously, as in other countries, a range of industries are concerned by the development of the new information infrastructure and the convergence of broadcasting and telecommunications. With regard to the Canadian debate, the particular view of the role of national cultural industries in the political and social fabric, as well as in the economy, is central. In telecommunications, the issue is limited to the question of ownership (foreign ownership is currently capped at 33 1/3 %). In broadcasting, foreign ownership was until recently restricted to 20% (1), and Canadian content is protected by specific obligations and encouraged by various incentives, in addition to the previously-mentioned production subsidies and

(1) In November 1995, allowable foreign investment in broadcasting holding companies was raised to 33 1/3%, to "bring the rules for broadcasting more into line with those in place for telecommunications firms". However, foreign ownership of any company holding a license for broadcasting programming continues to be restricted to 20%. See Canada, Canadian Heritage, "Government moves to increase access to investment capital for Canadian broadcasters". News release, 23 November 1995.
publicly-funded services. Film, publishing, record production and creative activity benefit from various funding programs in addition to the access to broadcast distribution provided by Canadian content requirements. All of this points to the importance of the Canadian position on the exemption of cultural industries from the general provisions of the Canada-U.S. Free Trade Agreement (carried over into NAFTA), Canadian solidarity with the European position on culture in the 1993 GATT talks and Canadian views expressed at the G7 meeting on the global information infrastructure in Brussels in February 1995.

■ The NII Debate in Canada - Antecedents

The Canadian NII debate really represents, in the words of one expert, "a new beginning for an old idea" (OSTRY, 1993, p. vi). In a fundamental sense, it goes back to the 1960s, and the creation of the federal Department of Communications, the launching of a domestic satellite program, and the decision to develop policy in the field of communications with an eye towards both cultural and economic concerns. National development and industrial development were to be the two poles of Canadian communication policy after 1969. The cornerstone of Canadian cultural policy was to be the broadcasting system, organized as a "mixed" public-private sector model, and closely regulated by an independent agency, the CRTC, to ensure both a strong Canadian presence in radio and television and the development of strong domestic industries. At the same time, communication policy aimed to develop communication infrastructure, mainly through the use of satellites - in some respects exporting the problem of national development north of the 49th parallel to the more comfortable reaches of outer space (1).

One of the first acts of the new Department of Communication, created in 1969, was to set up a task force known as the 'Telecommission' to examine the whole range of issues pertinent to a national telecommunications policy. According to scholar Robert Babe,

"...the DOC in these early years revised the past in attempts to incorporate communication technology into the Canadian creation myth, and moreover mythologized the future by positing nation building possibilities through communication technology" (BABE, 1995, p. 21).

(1) I am grateful for this insight to the work of Bram ABRAMSON, a graduate student in communication at the University of Montreal, who is preparing a thesis on the role of the Canadian space program in the formation of national identity.
Among other things, new communication technologies promised to enhance the possibility of fuller participation in public life, and so, in addition to investigating questions related to hardware and regulation, the Telecommission organized seminars and published reports on such themes as 'Telecommunications and Participation'. The results of the Telecommission studies were synthesized in a report entitled *Instant World*, published in April 1971 (1).

*Instant World* set the tone for the Canadian approach to communication development in the 1970s: continued public investment in hardware and infrastructure, subsidy and protective regulation of Canadian content, regulatory convergence of broadcasting and telecommunications. In its opening words:

"Telecommunications policy may have to be re-shaped if full advantage is to be taken of the opportunities that technology affords and if socially undesirable effects are to be avoided". (*Instant World*, p. i).

The reshaping of telecommunication policy focused on the blending of broadcasting and telecommunications, consecrated in 1976 by the addition of regulatory responsibility for telephone companies to the Canadian Radio-Television Commission - thereafter known as the Canadian Radio-Television and Telecommunications Commission. (Regulation of the common carriers had previously come under the authority of the Canadian Transport Commission and the Railway Act). Whereas previously the CRTC had concentrated on the role of broadcasting as a vehicle for promoting cultural identity, its conception of the Canadian public now became a consumerist one.

However, *Instant World* also introduced the idea of the democratic potential of communication. New telecommunications technology, the report stated, promised to transform broadcasting from a one-way medium "that treats viewers as largely passive homogeneous groups", into an interactive medium:

"More and more people will then be able to decide for themselves what they want to watch and when they want to watch it and, still more importantly, to originate programs themselves", it stated, in words prescient of a later generation of similar promises.

(1) Canada, Department of Communications, *Instant World, A Report on Telecommunications in Canada*. Ottawa: Information Canada, 1971. The Telecommission's work was conducted under the leadership of deputy minister A. E. Gottlieb, later ambassador to Washington in the period leading up to negotiation of the Canada-US Free Trade Agreement, precursor to NAFTA.
As early as 1971, then, there was an officially expressed hope that new communications technologies could be harnessed to deliver both a more rationally organized system of services as well as the framework for organizing democratic communication to enhance the quality of participation in public life. Most of all, *Instant World* highlighted the contradictory logics driving the development of communication technologies in Canada.

But nothing happened. Countervailing pressures on the federal government following the work of the Telecommission led to an erosion of the political will to act. While the subject remained on the agenda throughout the 1970s and 1980s, Canada never formally adopted a national telecommunications policy, and policy evolved on an ad hoc basis. Most of this was couched in terms of cultural promotion and public service but, nevertheless, despite the positions taken in bilateral and multilateral negotiations such as the FTA, NAFTA and GATT, foreign, largely American, content continued to flow through the veins of the Canadian communications system.

A 1981 DOC paper entitled *The Information Revolution and its Implications for Canada* (SERAFINI & ANDRIEU, 1981) underscored the prevailing mythology, adding a new twist: Canada was not, in fact, in the world communication and information vanguard, as it had believed throughout the 1970s; in fact, it lagged behind, and would have to take the train as it passed if it wanted to remain competitively advantaged on a world scale. Acknowledging that communication technologies tend to erode national sovereignty, it was to be expected that Canada would have misgivings; however, the information revolution was 'unavoidable':

"Canada has no choice but to promote vigorously introduction of the new technology in order to maintain and increase its international competitiveness" (SERAFINI & ANDRIEU, p. 96).

Cultural policy would be incorporated into this philosophy in the 1980s. A series of policy papers published in 1983 signalled the DOC's shift to a cultural industries approach, as the legitimation basis for public support of content development shifted from nation building to industrial growth. Over the next fifteen years the pivotal role of the Canadian Broadcasting Corporation would progressively dwindle, while public funds would be used to create and nurture an independent production industry for audiovisual products. Cultural nationalism would continue to be the predominant theme of policy discourse, but actual policy programs would focus on beefing up the 'industries' side of the cultural industries equation. Officially consecrated as the preferred fuel of the Canadian distribution system, Canadian content producers would keep pace with their global counterparts and the government would successfully "keep culture off the table" at the FTA talks.
Consistent with the historic Canadian policy stimulus of keeping pace with developments south of the border, the NII debate in Canada was launched early in 1993, within days of President Clinton's announcement of the US version. As a first step, the government commissioned a respected former senior official, Bernard Ostry to study the question. He reported in early 1994 (OSTRY, 1993).

The central message of Ostry's report to the government was this: the principal elements of a communication infrastructure symbolized by the information highway metaphor have been in place in Canada since the early 1970s, and the "newness" of the new technology is only relative. The political issues are exactly what they were a quarter-century ago; the obstacles to resolving them as well.

In fact, while the policy debate focused on developing an appropriate interface between technology and culture - what Canadian sociologist Thelma McCormack has called "the borderlines between two historic forms of knowledge and belief" (McCORMACK, 1995, p. 1) - technological development and cultural production in Canada had been harnessed to create new concentrations of corporate wealth and power oblivious to the social and cultural objectives encoded in legislation and regulatory policy.

If one were to take the NII debate seriously, to extend the argument of the Ostry report, the NII would have to be recognized as a public infrastructure, its use would have to be accessible to all, and in consequence, it would have to be publicly regulated, in the public interest.

The Canadian NII Debate

The government's next initiative was to create an Information Highway Advisory Council (IHAC) in 1994, to propose guidelines for public policy. Alongside the advisory council, the government instructed the CRTC early in 1995 to conduct public hearings on regulatory changes indicated by the convergence of broadcasting and telecommunications.

IHAC's mandate was to report on the basis of three stated objectives: to stimulate the economy, to reinforce Canadian cultural identity, and to ensure universal access at an affordable cost.
There was an interesting parallelism here, between what were real three sets of objectives, corresponding to the parallel and at times overlapping interests of industry, the state and civil society.

The Canadian debate since then has been characterized by repositioning of actors around these three poles.

The government and its agencies have asked: what are the new forms and mechanisms of regulatory and policy intervention that are appropriate for meeting of public policy objectives (and what indeed are these in the new context?).

Industry has been scrambling to discover which sector will prevail: in the process, various industrial actors have presented service offers aimed at both consumers and the regulatory authority. The new infrastructure will require a new set of industrial / regulatory trade-offs, in line with the adjusted national policy.

As for social groups, they wonder: what do we want, what do we need? The key question here has usually been articulated as this: which of the two conventional models, broadcasting or telecommunication, is most appropriate for meeting social needs?

The CRTC convergence hearings, held in March 1995, reflected these divisions. The CRTC's report, published in May 1995, framed the new policy issues in a way that reflected the contradictions of the new context (CRTC, 1995). Earlier, in the previously mentioned decision announced in September 1994 (CRTC, 1994), the CRTC had opened the door to industry competition and, especially, to telephone-based development of image delivery services. The decision was hailed, among others, by FCC officials who declared that Canada had, by this move, leaped ahead of the US in adopting a bold deregulatory posture (1).

But the CRTC has continued to promote the idea of a proactive approach to Canadian culture. While sensitive to the government's view that competition is the key to infrastructure development, the CRTC reported, "exclusive reliance on market forces to shape the development o

(1) This view was expressed, for example, by the FCC's Donna Lampert at an international symposium on communication technology convergence in Montreal ten days after announcement of the CRTC decision (La convergence des techniques de communication, University of Quebec at Montreal, 30 September 1994).
cultural products could well jeopardize the continued availability of Canadian voices and ideas on our communication systems* (CRTC, 1995).

*If Canadians are to benefit from increased choice, market entry should be regulated in a manner that contributes to the Canadian broadcasting system and the development of quality programming. It is therefore critical that we not ignore the economic limitations of our market, nor lose sight of what we have achieved, by embracing ill-defined promises of unlimited choice that often reflect more dogma than substance, more universal theory than Canadian reality* (CRTC, 1995, p. 6).

Under the heading of 'Competition', the CRTC announced an important shift, from supporting cable as the main instrument of achieving the objectives of the Broadcasting Act (which it had reaffirmed as recently as June 1993) to the new regulatory framework (announced in September 1994) which supports the development of competing distribution technologies, including VDT by telephone companies. Canadians want more choice in the packaging and distribution of broadcasting services, and combining telecommunication and information services competitively and accessibly is the key, the report stated.

Meanwhile, the notion of culture was broadening, and scholars and policy analysts were increasingly talking about cultural development (1). In the CRTC's view, this is articulated at the level of content. The notion of content is based on principles of shared national identity and public service. The Canadian system has developed mechanisms for promoting this: carriage rules for distribution systems, public support for production of Canadian programs, a licensing system to ensure products reach markets. The CRTC has announced that it will focus on furthering the objectives of the Broadcasting Act; some new services will be taken out of the ambit of the Act (if their purpose is not to promote cultural objectives, for example, video games). But the Telecommunications Act does not specify cultural or content concerns. What does this mean for new content-based services?

New program services

*should contribute to the creation and presentation of Canadian programming by adhering to Canadian content and spending requirements similar to those that currently apply to existing services of the same type* (CRTC, 1995, p. 33).

There is a consensus that all licensed distribution undertakings should make contributions to Canadian programming comparable to those currently required of cable.

---

(1) See, for example, RABOY, BERNIER, SAUVAGEAU & ATKINSON, 1994, pp. 291-315. In that article, we define cultural development as "the process by which human beings acquire the individual and collective resources necessary to participate in public life" (p. 292).
With this as backdrop, a new policy framework for telecommunications and broadcasting is being developed; it will be overseen by a new political superstructure, the shape of which is not yet clear. Since 1993, responsibility for culture and communication has been shared between two ministers and two government departments: Heritage, responsible for national cultural programs and institutions (such as the CBC), and Industry, which, not insignificantly, is heading the new information infrastructure initiative. The administrative separation of software from hardware leaves the future role of the CRTC unclear. Will there continue to be a public space for the interaction of social, economic and state interests regarding information infrastructure issues?

The Canadian position taken at the G7 ministers' meeting in Brussels in February 1995 was revealing in this regard. Promoting competition and affirming culture are not necessarily mutually exclusive, Heritage Minister Michel Dupuy told the gathering; the key was achieving balance. The information highway

"has the most prestigious cultural showcase of all time. It will reach the largest imaginable audience and permit the most wide-ranging intercultural communication ever. We should therefore not treat the issue of content lightly but keep in mind that the Highway's vitality will depend on its programming, not on its technological infrastructure" (Heritage Canada, 1995).

It was necessary to make this self-evident affirmation in Brussels, where the initial agenda was set by the US five-point program for the GII. Canada has known since the turn of the century what Europe has learned much more recently: that the US view that cultural production should be treated like any other business results in indigenous cultures being submerged in a tidal wave of Hollywood product. Canadian policy since the invention of radio has been geared towards ensuring countervailing forces where market possibilities do not suffice. In Brussels, Canada and the European members of the G7 added linguistic and cultural diversity to the GII program. It was not an innocent gesture.

"Neither a vehicle of cultural homogenization nor a mechanism for one kind of monopoly or another, it (the information highway) must instead embrace a diversity of international perspectives and languages, for the benefit of all citizens. It should not thrive at the expense of national cultures and identities... We must prevent the creation of any form of cultural monopoly on the information highway" (Heritage Canada, 1995, p. 42)

Openness and diversity, not concentration and uniformity, are the official legitimating principles of Canadian protection of domestic cultural industry. It is on this basis, for example, that Canadian ownership remains a central
tenant of broadcasting and telecommunications regulation, despite US calls for free access to foreign investment. (Questioning this tenet in the interest of more rapid development and complete integration of the Canadian "branch" of the North American information infrastructure was one of the main recommendations of the IHAC report).

Meanwhile, playing off a kind of good-cop-bad-cop routine, Industry Minister John Manley reminded the G7 ministers that Canada's telecommunications regulatory framework "places Canada at the forefront of countries with pro-market regimes" (Industry Canada, 1995, p. 47). The role of the Canadian state, however, was to promote a Canadian market.

"In encouraging market forces, governments have a role to play in setting policy, partnering certain activities with private industry and addressing market failures" (Industry Canada, 1995).

Cultural nationalism and public policy objectives notwithstanding, this has been the driving motivation of Canadian communication policy since the creation of the CBC and introduction of the "mixed" public-private broadcasting model in the 1930s.

Manley, too, called for going beyond the 5 principles adopted in Buenos Aires "to address the content that will flow through the pipe." Both ministers cited the degree of foreign penetration of Canadian cultural markets as evidence of an open, diversified communication system - 76% of English television, 95% of theatre-distributed films, 88% of records played on radio. In fact, reducing these percentages is the principal justification for Canadian policy.

IHAC's report was made public on 27 September 1995 (Information Highway Advisory Council, 1995). It contained over 300 recommendations. The document, according to the Toronto Globe and Mail "embrace(d) a pro-marketplace thrust" so prominent that the only non-business representative on the council, Canadian Labour Congress vice-president Jean-Claude Parrot, felt compelled to state a dissenting opinion (SURTEES, 1995). Among other things, the report recommended making competition the driving force on the information highway and liberalizing foreign ownership requirements in broadcasting and telecommunications. The key idea, repeated in several places in the report's 227 pages, was this:

"In the new information economy, success will be determined by the marketplace, not by the government" (Information Highway Advisory Council, 1995, p. x).
The report's main emphasis on the likely benefits to Canadian industry of a pro-market policy approach was tempered by its maintaining the traditional concern for Canadian content and public broadcasting as promoters of Canadian culture and identity. A council sub-committee, the Working Group on Canadian Content and Culture, sought to revitalize this conventional ground of Canadian cultural policy:

"Experience has shown that, while market forces alone may be sufficient to ensure rapid technological development, when the objective is to provide a broad and equitable range of intellectual and cultural content, these factors alone do not always suffice" (Heritage Canada, 1995, p. 1).

Synthesizing the difference, the question becomes, What will drive the information highway, content and socio-cultural objectives or hardware development and market demand?

The Working Group was studded with major cultural industry players, especially from the broadcasting-cable sectors - vested interests seeking to retain their policy advantage, a cynic might say. However, a paradoxical convergence of interests between industrial and cultural considerations provided a necessary antidote to the overall IHAC approach.

The Working Group's report was eventually published by Heritage, not Industry. But most of its 20 recommendations were integrally included in the IHAC report. The recommendations generally aimed to preserve and update the beneficial regulations and policies that have helped create and sustain Canada's cultural industries:

"Canadian cultural policy must be reaffirmed and strengthened in relation to the new information infrastructure" (Information Highway Advisory Council, 1995, p. 123).

The Working Group's pro-policy, pro-intervention (ultimately pro-protectionist) position was based on three critical assumptions: 1) the information highway is "a natural extension of the current broadcasting and telecommunication environments"; 2) "Current cultural and broadcasting policies have been an essential component to current success, in the face of ferocious competition from numerically superior foreign sources"; and 3) "cultural and broadcasting policies must adjust to the changing relationship between consumers and producers in order to ensure success in the future" (1).

(1) Canada, Heritage Canada, 1995, p. 3. A slightly different version of this text appears in the IHAC report.
For example, to stimulate creation and production of Canadian content, the group proposed navigational menu systems in English and French "to ensure universal access by all Canadians to all content" (Heritage Canada, 1995, p. 10).

"As choice expands on the Information Highway, securing 'shelf space' for Canadian content will be essential. However, to accomplish the objectives of the Broadcasting Act, Canadian content must also occur on a prominent shelf, at eye level. The challenge will be to establish clear rules for all distributors so that Canadian programming services retain 'priority' in a real and effective manner" (Heritage Canada, 1995, p. 12).

The extension of the conventional broadcasting model is implicit in proposals such as this one. Good for Canadian commercial producers of content, and presumed good for Canadian consumers who will thus be helped to find their way on the Canadian side of the information highway, it does not ensure access in the sense implied by the telecommunications model, nor does it take advantage of the interactivity or connectivity that hold out the promise of bi-directional communication, or self-propelled uses of the system.

The limitations of the mainstream policy proposals has been underscored by citizens' groups such as the Public Information Highway Advisory Council (PIHAC), which argued before the CRTC's convergence hearing that promotion of the broadcasting model for the Information Highway would mainly protect entrenched interests, not empower users (1). Consumers are not demanding the information highway; they are concerned about issues such as security, privacy and access to the means of communication, PIHAC argued. The telecommunication and cable industries, meanwhile, are engaged in a "turf war, wrapped in the utopian rhetoric of 'third wave' ideologues". They might have referred to the rhetoric of cultural nationalism as well.

PIHAC suggested taking the *Telecommunications Act* as a point of departure for the new infrastructure: maintaining the emphasis on carrier-content distinction and nondiscriminatory access features, with regulated rate-of-return based tariffs and guaranteed access to essential services. While maintaining the principles of Canadian ownership of the conduit and public ownership of the spectrum, this implied challenging capital interests, public policy assumptions, and accepted cultural policy.

---

In fact, a wide range of social approaches to the NII have emerged during the various consultations of the past two years. A consensus has developed around the notion that the federal government should establish mandatory infrastructure requirements, including a baseline of common key services, even within a framework of competition. A comprehensive study of consumer group input to the process refers to this as a "selective competitive model", based on a role for market forces and competition in some areas, with a public service role in others. According to the author of this study, such a model

"builds upon the Canadian tradition of a mixed public/private system, only with greater emphasis on policy initiatives favouring competition in selected areas and regulation ensuring affordability and access in others" (REDDICK, 1995, p. 57).

Within this consensus, however, the study found an interesting range of distinction between groups on surrounding the fundamental shape to be taken by the system. For example,

"better informed consumer interests have a broader conception of... 'communicative interaction'... a user-controlled, fully switched, two-way system of communication which allows users to be information providers and participants, as well as consumers" (REDDICK, 1995, p. 23).

Consumers in rural and geographically remote areas prefer competition and choice in content but not in infrastructure provision. Some groups want to extend traditional community network services and public space (such as the community cable channel) to include data communications. In general, consumers apply a broad definition to the notion of Canadian cultural content. In addition to the high culture products produced by Canadian cultural industries, groups want to include

"social and cultural information, data or communication activities produced by themselves or others (either individually or as groups) which is necessary to meet their daily social, educational, economic and cultural needs. It allows them to fully participate in society as consumers and as citizens" (REDDICK, 1995, p. 29).

**Towards a Hybrid Model of Public-Private Communication**

In the current state of the Canadian debate, the two buzzwords 'competition' and 'culture', gleaned from the title of the CRTC's May 1995 convergence report, well describe the two dimensions of the issue: it is industrial (commercial, business- and consumer-oriented) and it is sociocultural (public interest based and citizen-oriented). Policy design must take both of these dimensions into account if the NII is to be developed for the common good.
More than 1,000 organizations made submissions to the hearing leading up to that report. Overwhelmingly, the accent was on content. Social actors are concerned about it; suppliers promise to offer it; distributors are vying for who can provide the best delivery system for it. The regulatory authority is also engaged in its own positioning: its raison d'être is to ensure the system will remain open and receptive to indigenous content.

Content means different things in broadcasting and in telecommunication, which are based on two distinct models of communication, distinguished by the different notions of access each one encompasses. Both are of considerable importance to social groups.

In a perspective of democratization, the difference between the two models is critical. In the broadcasting model, emphasis is placed on the active receiver, on free choice, and access refers to the entire range of product on offer. In the telecommunication model, emphasis is on the sender, on the capacity to get one's messages out, and access refers to the means of communication.

The reception model of broadcasting is based on the notion of a shared culture. The sender's model of telecommunication is based on interactivity. From a regulatory perspective, the emphasis has been on content in broadcasting, on carriage in telecommunication. Until now, broadcasting and telecommunication in Canada have been regulated according to two sets of policy objectives, spelled out in the separate pieces of legislation we looked at above. The objectives follow a set of parallel lines, sometimes overlapping, not really conflicting. However, the mechanisms that have been put in place for achieving them are not necessarily appropriate for the new context, which will require a new set of policy measures. The CRTC is trying to sort all this out, reconcile the historic differences between the two models, and harmonize its regulatory framework.

Historically, Canadian communication policy has evolved around the principle that communication is central to nationbuilding. The Canadian system has developed ways of promoting this: an emphasis on publicly owned and operated national institutions, carriage rules for distribution systems, public support for production of Canadian content, licensing of services to ensure that products reach their markets.

Canadian domestic industries in broadcasting and telecommunications have flourished within this policy framework, by providing services designed to meet national policy objectives. At the same time, the public service
basis of communication has kept social preoccupations on the policy agenda. Today, industrial groups are positioning themselves according to their current market positions and the new services they expect to be able to offer. For social groups, however, the issues are less clear. Regulation of content, for example, is a means of meeting social and cultural objectives in the broadcast model; it can be a means of gatekeeping and censorship in the telecommunication model. So while industrial groups divide along the lines of competitive market positioning, social groups are situating themselves in the debate according to expectations based on different conceptual and instrumental approaches to communication.

In order for the new information infrastructure to realize its emancipatory potential, public policy will need to promote a new hybrid model of communication, which combines the social and cultural objectives of both broadcasting and telecommunication, and provides new regulatory mechanisms - drawn from both traditional models - aimed at maximizing equitable access to services and the means of communication for both senders and receivers.

The industrial models being banded about, meanwhile, are also hybrid models, but they are designed according to a different, industrial logic (reflecting the hybridization brought about by technological convergence). For example, the idea of paying as you go for consumer products like movies and sports events applies a principle of telecommunication to cultural content that has hitherto been considered the purview of broadcasting. Conversely, the development of interactive entertainment activities and services such as tele-shopping assumes that manipulating information in the act of consuming it is somehow inherently uplifting.

It is difficult to situate the public interest in this landscape, dominated as it is by promoters of various projects. But at least we can identify the issues, and through them, certain public policy objectives: universal access for suppliers to distribution systems; interactive dialogic communication between users; affordable reception of consumer services; publicly subsidized citizenship services.

For example, in the CRTC discussion of universality, it is recognized that the public interest requires rethinking traditional approaches to achieving social goals; "the policy objective of universal access at affordable prices will not be realized without some support", that is, universal access will depend on a mix of market forces and public subsidy. The CRTC further suggests mandatory provision of at least one public access point in each
community and requiring any new distribution undertaking to make "comparable contributions to outlets for community expression" to what is presently offered by the community cable channel. Telephone companies be advised:

"Parties wishing to operate new broadcasting distribution undertakings should come forward with innovative proposals for providing community expression, perhaps through incorporation of interactive community dialogue and vehicles for sharing information" (CRTC, 1995, p. 46).

The CRTC (and the Information Highway Advisory Council, via its working group on content and culture) also foresee tapping the revenues of the new system for funding sources for Canadian services.

In the particular Canadian context, an overriding concern remains cultural sovereignty. This implies: maintaining foreign property restrictions and Canadian content requirements for licensed services. Cultural sovereignty objectives have historically been promoted through publicly owned public services; this then implies reaffirming the public service, public utility basis of the national communications system. Meanwhile, another dimension is worth mentioning.

Internally, who should have jurisdiction over communication and culture, Ottawa or the provinces, is one of the recurring themes of the eternal debate over Canada's constitutional future. Not surprisingly, another alternative perspective comes from the internal periphery of the Canadian communication policy environment - Quebec. Canadian constitutional law since the 1930s has awarded exclusive jurisdiction over communication (first broadcasting, more recently telecommunication as well) to the federal government, despite periodic claims from the provinces, most consistently Quebec. However, in the perspective of the NII, new potential uses overlap into areas of provincial jurisdiction, such as education, health care and social services. "Repatriation" of powers in communication has been an issue in various constitutional reform packages since the 1970s. Temporarily stalled by the recent referendum on sovereignty - which would have resolved the issue dramatically - the federal-provincial push and pull is another particularity of the Canadian policy dynamic. In this context, it is interesting to look at the Quebec government's approach to the NII.

While the federal government's IHAC was studying the big picture, a Quebec committee, with somewhat less fanfare, was proceeding as well (and in some cases, with the same industry representatives). The Quebec report came out in July 1995 (Inforoute Québec, 1995). Here, the emphasis was on the information highway's potential impact on education,
health care and social services, the promotion of language and culture, the organisation of public services and, residually, the development of industry and export markets. Under "equality of access", one reads:

"It is necessary to guarantee the right to information and knowledge for all citizens, without regard to their financial resources or their language of use, in order to avoid the division of Quebec society into two groups, those who have access to the information highway and those who do not" (Inforoute Québec, 1995, p. v, Our translation).

This is not to deny the obvious benefits to industry of such a policy, for as the report continues to say: "Facilitating accessibility in fact constitutes a way of stimulating demand for products and services" (Inforoute Québec, 1995, p. 37). Indeed, like its Ottawa counterpart, the Quebec committee that drew up this report was top-heavy with major industry players (some of whom served on the two councils, providing an interesting example of the way the present constitutional arrangement enables some to butter their bread on both sides). But the difference could be read in passages in which the report develops notions such as the idea that building the information infrastructure should be seen as a "social investment", whose economic benefits will be reaped by future generations.

Characteristically, most of the legal and regulatory instruments required to orient the emerging technological environment remain under Ottawa's jurisdiction. Thus, while the federal government indeed has the power to act on its advisors' report, the Quebec report included the necessary recommendation that the Quebec government

"use all means available to see that federal laws and policies regarding the information highway not only recognize the cultural specificity of Quebec but also allow Quebec to develop and reinforce it" (Inforoute Québec, 1995, p. 33).

In an age of globalization, one may be tempted to marvel at proposals that are contingent on a more active role for the state. But public attitudes towards collective institutions surely rank among the most significant markers of cultural distinction, and just as Canadians generally identify their social safety net, gun control and the CBC as characteristics that distinguish their country from the United States, the Québécois continue to define their difference in terms of the French language, the decentralisation of powers and the role of the state as the motor of social, economic and cultural development.

In global terms, the various national NII debates point to the need to update the basis for legitimation of public policy intervention, to
internationalize the issues identified through the local expression of social demand, and ultimately, develop new global regulatory mechanisms. In Canada at the moment, as in the US, it is industrial offer rather than social demand that is driving the construction of the NII. In Canada, however, one has to factor in the 'high policy' objectives and the particular set of jurisdictional disputes, tied to the role of communication in constituting national identity, the role of cultural nationalism in legitimating the designs of industry and the critical perspective put forward by social groups, both with respect to the substance of the project as well as the process surrounding its development.

In this context, the Canadian debate highlights the ongoing role of the state as the motor of industrial development and the organizer or facilitator of sociocultural development. For historic as well as pragmatic reasons, a sociocultural approach to communication policy persists in Canada (although the resources to support it may no longer be there). For Canadian society, this has meant the possibility of a public communicative space in which various social, economic and political discourses have been able to circulate - a space which, in its better moments, can approach the ideals of a democratic public sphere. The stakes of the current debate are no less than the maintenance, the flourishing, or the disappearance of same.
Bibliography

BABE E. Robert,  
-Telecommunications in Canada: Technology, Industry and Government. Toronto  
University of Toronto Press, 1990.  
- "Media Technology and the Great Transformation of Canadian Cultural Policy"  
Presentation to the conference on 'Media Policy, National Identity and Citizenry in  
Changing Democratic Societies: The Case of Canada', Duke University, 6-7  
October 1995.

Canada, Canadian Heritage, "Government moves to increase access to investment  

Canada, Department of Communications, Instant World. A Report or  

Canada, Heritage Canada, Report of the Canadian Content and Culture Working  

Canada, Heritage Canada, "Notes for a Speech by the Honourable Michel Dupuy,  
Minister of Canadian Heritage, on the Occasion of the G7 Ministerial Conference on  
the Information Society, Brussels, Belgium, February 26, 1995".

Canada, Industry Canada, "Speaking notes for the Honourable John Manley,  
Minister of Industry, 'Universal Service Provision on the Information Highway' at the  
G7 Ministerial Conference on the Information Society, Brussels, Belgium, February  
26, 1995".

Canada, Information Highway Advisory Council, Connection Community Content  
The Challenge of the Information Highway. Ottawa: Minister of Supply and Services  

Canada, Mandate Review Committee, Making Our Voices Heard: Canadian  
Broadcasting and Film for the 21st Century. Ottawa: Minister of Supply and Services  
Canada, 1996.

Canadian Radio-Television and Telecommunications Commission, Telecon  

Canadian Radio-Television and Telecommunications Commission, Competition and  
Culture on Canada's Information Highway: Managing the Realities of Transition  

DORLAND Michael (ed.), Canada's Cultural Industries. Toronto: James Lorimer,  
forthcoming.

LAMPERT Donna, "La convergence des techniques de communication", symposium on communication technology convergence in Montreal, University of Quebec at Montreal, 30 September 1994.


REDDICK Andrew, Sharing the Road: Convergence and the Canadian Information Highway. Ottawa: Public Interest Advocacy Centre, 1995.


SURTEES Lawrence, "Competition on information highway urged". Globe and Mail, 28 September 1995.