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# WHITHER LIBRARIANS?

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### WHITHER LIBRARIANS?

I wish to share with you some of my thoughts, concerns, and perhaps more importantly my questions about the place and role of the librarian in the information and communication technological environment in which we currently find ourselves.

I have tried to choose my words carefully in my opening statement, for although some of you may have expected a controversial presentation today, I would like to believe that the controversy will focus on ideas and concepts and not on vocabulary. Thus, as a beginning, I have deliberately chosen the term "librarian" rather than "information professional" and I have described the current information and communication technological state as the "environment" rather than "revolution". Had I used the terms information professional, which perhaps is a more descriptive term; and technological revolution, which some may feel is the state we are currently in, I am confident that the debate would have begun and ended here; and that would have been unfortunate, for there are some more important things I would like to say.

Why the title, Whither Librarians? I chose this title because I find myself today in a similar situation to one in which I was over five years ago, when I participated in a fairly intensive senior management leadership program. The objective of the program was to understand the place, role and responsibility of Canada in a global economic and social environment. To gain this understanding, I travelled to over twenty-two countries, listened to and questioned the leading policy and decision makers in Canada and the countries visited, and read and debated with my colleagues extensively. The output, after a year of study and travel, was the participation in the preparation of a report that contained observations, and recommendations to Canadian policy makers on the future direction and role of Canada in this new global marketplace. The final report was entitled "Whither Canada?"

I believe that librarians, as a community, must also question, but more importantly, boldly articulate their role and place in the global environment of technological advancement. There is a requirement to discuss, and debate, read extensively, talk to those who control fiscal resources, and educate the senior policy and decision makers about the new information reality. I therefore believe that the question is most apt, for my talk today, Whither Librarians?

It is also comforting to know that I am not alone in this belief. Karen Drabenstott, produced an extremely important publication for the Council on Library Resources in February 1994, entitled <u>Analytical Review of the Library of the Future</u>. The chapter in which she discusses "Paradigm Shifts and an Uncertain Future", and "Libraries and Librarians in the Future", is entitled "Whither Libraries?"<sup>1</sup>

I hope that by the conclusion of my comments today, if I have not given a satisfactory answer to the question "Whither Librarians?", I will have at least posed a few critical questions, which we may agree requires further consideration and research. Further to this end, I hope to bring some clarity to the

discussion of the components in this information and communication technological environment.

I will begin by posing a common question that many of you have, will, or are currently asking. What is the role of the librarian in this age of the Information Highway? This question is often asked in a state of fear, uncertainty, or doubt, but rarely in a state of optimism or excitement. And, why is that? But, perhaps what is of equal importance, is the mindset of those who ask the question.

I would like to explore with you such issues as the concept of the Information Highway, or as referred to south of the border, the Information Superhighway; the various mechanisms that international decision makers have used to harness these major information technological advances for the enhancement of societal goals; and what this may mean for the education and "skill enhancement" of the librarian. Hopefully, at the end of my comments, we will be in a better position to answer the question posed in my title, "Whither Librarians?".

The metaphor "Information Highway" is extremely graphic but I happen to believe it is an unfortunate turn of phrase. For as soon as you begin to expand upon the metaphor, a high degree of obfuscation is introduced, and one loses the essence of the important issues being addressed. For example, how does one seriously discuss issues relating to **universal access to information and information services**, **life-long learning**, **privacy** and **affordability** when phrases such as "does the Information Highway go south?", "Will there be pedestrian walkways, or laneways for slower moving vehicles?", "Who decides on the toll rate?", Or "Where will the access roads be located, and who will pay for building them?". Graphic yes, but the object of the game soon becomes dreaming up new expansions to the metaphor, "Information Highway", rather than finding solutions to the critical questions inherent in these cute phrases.

In the United States and in the international information community there has been an attempt to bring some clarity to the area of electronic information and communication networks. The U.S. Department of Commerce, National Telecommunications & Information Administration has recently released the first report of the National Information Infrastructure Advisory Council, entitled: <u>Common Ground: Fundamental Principles for the National Information Infrastructure</u>. Quoting in part from the report, "the National Information Infrastructure. Quoting in part from the report, "the National Information Infrastructure (NII) holds great promise for improving the quality of life for all individuals. It will transform the way people work, learn, and live. It will also create new opportunities for individuals to communicate, collaborate, provide, and receive information of all kinds. And it will better enable individuals to actively participate in the political process."<sup>2</sup>

Again quoting from the report, "the NII has been variously described as an 'Information Superhighway', a 'network of networks', and even a 'nationwide system that will allow all Americans to take advantage of their rich resources in information, communication, and computing technologies'. The NII is all these things and more... By linking large numbers of individuals and institutions to one another and to an unprecedented array of information and services, the NII has the potential to be this country's most significant asset in the knowledge-based economy of the coming century."<sup>3</sup>

Very quickly the emphasis of the work of the U.S. NII Advisory Committee seemed to shift from national to global considerations. One of the basic tenets in the report is that the NII must be an integral part of the Global Information Infrastructure (GII). Another quote: "the global accessibility and use of information is especially critical given the increasing globalization of markets, resources, and economies. The NII, therefore, must be developed and deployed with the much broader, more complex GII in mind."<sup>4</sup>

Also in early 1994, the Minister of Industry Canada created an Information Highway Advisory Council to assist the federal government in developing and implementing a strategy for the Information Highway. According to the Canadian Advisory Council, the "Information Highway is a metaphor for the host of possibilities involved in the capture, storage, transmission and reproduction of information, whether it is text, visuals or sound."<sup>5</sup>

"The terms Information Highway or Electronic Highway denote the advanced information and communications infrastructure that is essential for Canada's emerging information economy. However, as a means of describing the scope and depth of the changes that are currently underway within our society and of reflecting the aspirations and concerns of individual Canadians, it is an imperfect concept. The term conveys imagery about the physical structures through which information will move, such as networks, terminals and databases, but does not capture its potential as a network for building a new sense of Canadian community and opportunity."<sup>6</sup>

I believe that the Advisory Council's ability to get to the heart of the matter is reflected in the statement made by David Johnson, Chair of the Advisory Council in October, '94, "the Information Highway, in our view is not so much about information as it is about communication in both it narrowest and broadest senses. It is not a cold and barren highway with exits and entrances that carry traffic, but...a personalized village square where people eliminate the barriers of time and distance, and interact in a kaleidoscope of different ways."<sup>7</sup> Of course we could spend all the time dedicated to this conference trying to reach a consensus as to what are the full implications of this statement.

In the January 1995 report of the Working Group on Access, Affordability and Universal Service on the Canadian Information Highway, further precision is given to the concept of Information Highway. "Electronic networks and services are putting the world's information and entertainment resources at our fingertips. They are transforming the ways we work and do business, the ways we study and do research, how we educate our children and entertain ourselves, and how we bank and pay our taxes. Networks and information services are vastly increasing the options available to us in education, health care, government services, and cultural and community activities."<sup>8</sup>

Although I have been focusing my attention on the definition and scope of the National Information Infrastructure or the Information Highway, I believe that it is important to introduce an organizational dimension at this point. I will be commenting on the possible implications of this later in my presentation.

The U.S. Advisory Council on NII consists of a thirty-seven member Advisory Panel, which was formally

established and appointed in early 1994. The Council represents many of the key constituencies with a stake in the NII, including private industry; state and local governments; community, public interest, education, and labour groups; creators and distributors of content; privacy and security advocates; and leading experts in NII-related fields. It must be observed that of the thirty-seven stakeholders, only one is a librarian. While recognized internationally as a renowned educator in the field of library and information science, she is the only library science stakeholder on the Council. As I have said, I will come back to the significance of this later.

As with the U.S. Advisory Council on NII, the Canadian Information Highway Advisory Council represents the various stakeholders who are concerned with, indeed dedicated to, the concept of an integrated and seamless network of networks that will carry and support a vast range of advanced communications and information services. Of the 29 members of the Advisory Council, however, once again, there is only one official voice from the library community.

#### Is this a significant observation? Yes, I believe it is!

I believe that this observation is at the foundation of the fear, doubt, and uncertainly about the role and place of the librarian in the age of the Information Highway or all that is inherent in the concept of the new information infrastructure.

One of the strong voices of the stakeholders in the Information Highway debate in Canada is the Coalition of Public Information (CPI), and if I stretch just a little bit, I can claim CPI as a voice for the library community. CPI was formed in November 1993 to ensure that the developing Information Highway serves the public interest, focuses on human communication and provides universal access to information. As a member of the Advisory Council, Elizabeth Hoffman is the principal spokesperson for CPI, and what a strong voice she has in this important forum.

At the April '95 meeting of the Advisory Council, she presented the CPI's report entitled: <u>Future</u> <u>Knowledge - a Public Policy Framework for the Information Highway</u>. In addition to recommendations to the federal government, the principal beliefs of the Coalition are presented. For example, it believes that:

Canada's Information Highway should be based on the foundation stones of:

- universal access and ubiquity;
  - freedom of expression, pluralism and intellectual freedom;
  - the right to privacy; intellectual property and copyright; and
  - employment and the quality of work.

CPI believes that strategies are required:

 to maximize the benefits of the Information Highway, such as economic growth/competitiveness, increased productivity, enhanced quality of life, and Canadian content and sovereignty;

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• to develop and demonstrate applications in electronic commerce, life-long learning, health care, government services and civic networking;

• to maximize the ability of Canadians to connect electronically (interconnection interoperability) across the country and around the world.<sup>9</sup>

There is little doubt that librarians, as a community, can "sign on" to the beliefs and basic principles of CPI. Indeed on an individual basis, I am sure that many librarians may have participated in the public consultations held across Canada, the results of which produced the report. However, that same library community, one of the key stakeholders in the current Information Highway debate, is not a strong voice in this global discussion. It is as though the information systems and services agenda which was once the domain of the librarian has been taken over by others - the private sector, public policy makers, nongovernmental organizations and powerful pressure groups, etc. In the reading that I have done of the library literature, I have not come across policy framework documents which, unlike the CPI report, have been read into the record of proceedings of these important fora.

What literature I have read addresses the issues of the profile or the skill sets required for the "information professional" who must work in this new electronic environment; and in an age when the term 'information' includes such diverse content as movies, data bases, messages, pictures, music, programming - anything available on our communications network.

The literature seems to underscore the uncertainty, dare I say fear, that librarians have about this new age and the feeling that somehow they have been, or are going to be, excluded. Although I would like to see more assertiveness on the part of the library community, that is, taking a strong position on the key issues relating to National Information Infrastructure or the development of the Information Highway, I must admit that some of the most interesting and I believe important literature relates to the development of critical skill sets for the new librarian. On the one hand, I am fascinated as well by the electronic tools which are being used to present these views, yet on the other, at the end of the day, I am forced to ask the question, "Has very much changed?".

D. Kaye Gapen, former Director of Libraries at Case Western Reserve University, has written a very interesting chapter in the publication <u>The Virtual Library</u>: <u>Visions and Realities</u>, edited by Laverna M. Saunders. In her chapter, "The Virtual Library: Knowledge, Society, and the Librarian", Gapen goes back into the historical literature and quotes extensively from Jesse Shera's <u>Sociological Foundations of Librarianship</u>, published over twenty-five years ago.

In 1970, Shera wrote : "What is it that librarians do that no one else does? I am convinced that the role of the librarian in society...is to maximize the utilization of the graphic record for the benefit of society. In other words, <u>his</u> function is to serve as the mediator between man and graphic records, not only books, but sound recordings, pictures, audiotapes, charts, whatever contributes to the advance of human knowledge...The object of the library is to bring together human beings and recorded knowledge in as fruitful a relationship as it is humanly possible to be." It seems to me that if we had a Jesse Shera-like spokesperson today sitting around the Information Highway table, some of us would not be so concerned about the emphasis and focus of the current debate.<sup>10</sup>

Gapen makes the point that the real crisis is our inability to understand the librarian's control responsibility and contributions to the technological infrastructure. This expands upon James Beniger's thesis, which is that libraries are experiencing a control crisis caused by a lack of public understanding and, therefore, funding for responding effectively to information proliferation. Gapen goes on to describe the library "...as a social phenomenon in order to get closer to the perception that the library is librarians rather than books the library is communication rather than routine or a store house, and that the mission of the library is actually the social and intellectual responsibility of the librarian to participate with our publics in the solution of problems and the creation of new knowledge."<sup>11</sup>

What is important to note here is that Gapen undertook research on the "virtual library" in order to be able to contribute to the global debate on future direction of graduate programs in library and information studies. In exploring what skills are required for the new graduate librarian, she also explored the possible need to change the mission of the library of today.

There is another major initiative of which many of you may be aware. In late 1994, the Kellogg Foundation awarded the University of Michigan, School of Information and Library Studies a 4.3 million U.S. dollar grant to provide national leadership in educating information professionals of the 21st Century. The five-year grant will provide for restructuring the school's learning environment to produce professionals in the age of digital information, and it will support the formulation of a

national, multidisciplinary consortium to define new areas of professional specialization to serve society's needs for information access.

This project is a part of the Kellogg Foundations's program to make human resources a central part of the Global Information Infrastructure initiatives. Kellogg and the University of Michigan share the view that there is a need to educate a professional with understanding and deep commitment to human users of information, as well as the ability to use and shape digital systems technology to serve users' needs. The objective of the project is to educate professionals with broad competency in information systems, not simply to house the separate areas of librarianship, applied computer science and management information systems in one administrative unit.

Apart from the significance of a foundation such as Kellogg funding such an initiative, what I find quite extraordinary is the mechanism that the university is using to formulate the new academic program. The very technology that is the subject of some concern and disquiet to librarians is being used to hold an international discussion on the creation of a new academic program that produces the leaders who create, organize, manage, and apply new forms of libraries and information resources.

In January of this year, a listserv, CRYSTAL-ED was established to, in the words of the listserv manager (Karen Drabenstoff, author of the <u>Analytical Review of the Library of the Future</u>) "... garner a wide range of opinions, exchange ideas, and learn from others involved in comparable activities." From January to July, ten major topics were covered, such as : envisioning information-intensive environments in the year 2015; identifying the knowledge and skills that graduates require in a future-oriented program; the library of the future; and distance-independent learning. I have mentioned these four topics specifically, for they reflect the interest and focus of the current discussions on the Information Highway and Information Infrastructure.

As a silent observer, I have followed the CRYSTAL-ED discussion quite enthusiastically. The quality of the discussion has been extremely high, and the questions posed are fundamental to trying to come to grips with who will be managing the information resources in this new electronic age. What are the skills required for those who must make decisions about how information is organized; how it is packaged and presented; how are users and their needs identified; and how are the tools or mechanisms made available for ensuring that there is indeed universal access to this explosion of information? The thought that a powerful new academic program can be formulated by having an electronic discussion by experts from around the world is quite exciting. There can be no question as to the high quality of the final product. For content as well as for process, I recommend this initiative to you for scrutiny.

With such an exciting initiative underway, why is it that I am disquieted and ill at ease? Perhaps it is due to the realization that serious discussions about the role and place of the librarian in the new technological age are being held amongst ourselves, and within our own professional community. The listserv participants are either library and information science academics, or they are active library professionals. The participants are <u>not</u> the policy makers who control the resources to support the systems that these new librarians will create. And then I ask myself, how can the outcome of the listserv discussion feed into

the business and the formal agenda of the Information Highway Advisory Council? How can the postings of the listserv influence the current discussions on access and social impacts; Canadian content and culture, competitiveness and job creation; learning and training; and research and development, applications and market development?

As reflected by the high quality of the substantive comments made by the listserv participants, the library community is quite articulate about its role and place in this current electronic information age. There is deep understanding of the current technological environment, and of how the librarian can contribute to its systematic progression.

The problem is that those who formulate the public agenda do not seem to be listening, or are not in a position to "tune in" to our conversation. In the current discussion on the Information Highway, libraries as a source of information (most often bibliographic) are regularly cited. The librarian, however, as a major stakeholder and therefore a critical player in the decision-making and/or in the design process is largely overlooked, dismissed, or ignored.

Let me pose another question; is there within the national or international library community, a powerful body that can speak boldly on issues of concern relating to the Information Infrastructure or the Information Highway, in the same forceful manner as the Coalition for Public Information? Personally, I do not believe that it is of particular importance what bold statements are made. What is important is that the statements are assertive and positive, not apologetic. I also find it most intriguing that librarians, individually, are often active members of various lobby groups concerned with issues of universal availability of information services or equity of access to sources of information by all segments of the society, yet there appears to be a void in this public debate on the role or the place of the librarian.

I am also intrigued by the fact that librarians speak quite eloquently about the "information rich" and the "information poor" and the widening gap between those who have access to information and those who do not. Yet in the debate on the scope of the Information Highway and, continuing this most inappropriate metaphor, the debate on who decides upon the <u>signage</u>, the <u>entry roads</u>, and the <u>fees for access or tolls</u>, librarians with all of their historical skills sets in these areas are conspicuous by their absence around the debating table. I state this, even while recognizing the fact that in Canada and the United States library groups and associations have submitted important briefs to the different bodies considering the issues of the Information Highway. Nevertheless, it must be noted that these groups and associations are not active and full members of these bodies and thus are not part of the team making the recommendations. Thus the very group dedicated to lessening the gap between the "information rich" and the "information poor", is itself being marginalized, and runs the risk of becoming irrelevant. Strong words? Perhaps, but I believe that they are true.

What can librarians do to influence significantly the Information Highway agenda and not be victimized by it? What can librarians do to demonstrate that they as a community are a major stakeholder and thus critical participants in the Information Highway debate? How can librarians be actively sought out by other

stakeholders to become part of the solutions to some of these very thorny problems mentioned throughout my comments? One quickly realizes that the questions are much easier to pose than to answer!

I am certain that all of us can think of several meaningful steps that can be taken to find answers to these questions. As my contribution I would like to focus on one aspect, which to some may seem obvious. I have spoken about stakeholders participating in the various fora discussing the Information Highway and its real and potential impact on society; and that librarians, as a community, have not been identified as a major stakeholder. Let me digress with an example: had the librarian, as a stakeholder, been part of the debate on copyright of digitized information, we would currently be looking at a different set of issues regarding the definition of "browsing" and its linkage, real or imagined, to reproduction.

I would like to propose that part of the answer lies in developing alliances and partnerships with some of the other key stakeholders. That means entering into alliances with others as <u>equal partners</u>, not as a client or customer, which is often the case when librarians interact with the private sector. I can envisage that in the near future, librarians will have to join forces with publishers and distributors, authors, and several actors in the commercial information and communication industry. For many of these stakeholders, they have products and services that will be manipulated, disseminated, and managed by the information technologies or networks. What they do not have is the theoretical framework for formulating strategies for overcoming the bottlenecks of timeliness, affordability, accessibility, and storability. The tools required for the development and implementation of these strategies are the tools of today's, and dare I say yesterday's, librarian. I refer you to my earlier quote of Jesse Shera in 1970. (See p. 9)

Having stated that alliances must be formed with the various stakeholders, how do librarians, as stakeholders, yet to be recognized or accepted by the larger community make themselves known? Although we are all looking forward to the final reports of the various advisory councils on the Information Highway and the National Information Infrastructure, when they are produced and the advisory councils disbanded, key fora will no longer be available in which librarians can participate and demonstrate their rightful place and role. On the other hand, we must realize that the debate has just begun, and that this debate is in the public domain. From the ultimate decision and policy makers, those who control and decide upon resource allocations, to the average citizen, the debate is heated on issues such as who decides on what information is available, to what audience, at what price, and in what form? Issues of <u>privacy</u> and <u>affordability</u> are just two examples that are receiving constant coverage in the media. Librarians as a community must make their voices heard, strongly, in these debates. Historically their training has prepared them for making significant contributions to these issues, and the academic programs that are now being designed to reflect the new technological developments can only strengthen the quality and power of that voice.

Finally, then, I submit that the answer to Whither Librarians? is still not known, for the discussion is not over. What is known, however, is that librarians must speak out in one voice as to their role and place in this new technological environment which we in Canada call the Information Highway. I submit that it is

not a issue of whether there is a role or place, but rather, it is the community of librarians who must ensure that what they have been saying so articulately amongst themselves will be directed to and heard by those who are currently setting the debate agenda.

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1. Karen M. Drabenstoff, <u>Analytical Review of the Library of the Future</u> (Washington, D.C.: Council on Library Resources, 1994), p. 161-174.

2. U.S. National Information Infrastructure Advisory Council, <u>Common Ground:</u> <u>Fundamental Principles for the National Information Infrastructure: First Report</u> (Washington, D.C.: U.S. Dept. of Commerce, 1995), p.4.

3. Ibid., p. 1.

4. Ibid., p. 5.

5. Canada, Information Highway Advisory Council, <u>Access. Affordability and Universal</u> <u>Service on the Canadian Information Highway</u> (Ottawa: Industry Canada, 1995), p. 1.

6. Canada, Industry Canada, <u>The Canadian Information Highway: Building Canada's</u> <u>Information and Communications Infrastructure</u> (Ottawa: Industry Canada, 1994), p. 1.

7. Canada, Information Highway Advisory Council, <u>Providing New Dimensions for</u> <u>Learning. Creativity and Entrepreneurship: Progress Report</u> (Ottawa: Industry Canada, 1994), p. 3.

8. Canada, Information Highway Advisory Council, <u>Access, Affordability and Universal</u> <u>Service</u>, p. 1.

9. Coalition for Public Information, <u>Future Knowledge - a Public Policy Framework for</u> <u>the Information Highway</u> (Toronto: The Coalition, 1994).

10. D. Kaye Gapen, "The Virtual Library: Knowledge, Society, and the Librarian", in <u>The Virtual Library: Visions and Realities</u>, ed. by Laverna M. Saunders (Westport: Meckler, 1993), p.1.

11. Ibid., p. 5.