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"Universities: Change is Mandatory; Survival is Optional; Choose Wisely"

Fred A. Aldrich Lecture, Memorial University, St. John's, Newfoundland.

February 24th 2004



I'm happy to have been honoured to perpetuate the memory of Dean Fred Aldrich who was graduate dean here, if I am not mistaken, between 1970 and 1987. When I told SSHRC's old timers that I was to give the Aldrich Lecture, they said: "You have to read Dean Aldrich's historical account of the Canadian Association of Graduate Schools, better known as CAGS." I did and I amused myself at the fights Dean Aldrich and his colleagues had with SSHRC in the early 1980s. It seems to have been pretty hard hitting. Let me quote Dean Aldrich about the nature of his concerns about SSHRC:

[You do not listen to us.] We are concerned about your policies, procedures and apparent lack of efficiency. You do not return our phone calls. You do not respond to correspondence. Many of your deadlines dates are inconvenient . . . Some researchers feel that SSHRC does not trust them. There is insufficient emphasis on graduate students . . ." (F.A. Aldrich, *The More Things Change: A Somewhat Reminiscent History of CAGS*, AUCC, 1988, p. 107)

And it goes on and on and on. The beauty of the story is that Dean Aldrich found a solution. In his book, he reflects:

[With all these fights going on], I confess to sitting there thinking how much it looked like the Roman Forum, and how odd it is that my thoughts seem to not have been totally wrong. (p.108)

A committee was struck that apparently resolved the problems over time. So, I'm really pleased to celebrate this man, whom I have never met, however critical he was vis-à-vis SSHRC, because he was damn concerned with the destiny of graduate students in this country. Thank you for this honour.

Thank you also for providing me with an occasion to put on paper ideas that I had been toying with for a long time. In the last couple of months, I wrote, with some help, the SSHRC transformation consultation framework. That paper addresses issues that are pretty much the same as those I will discuss today, but the approach differs quite radically.

The SSHRC document examines the world of social sciences and humanities from the point of view of a granting council. Preparing this talk gave me the chance to look at these disciplines from a different stand, from the point of view of the inner workings of contemporary academia: the evolution of universities, their structures, their reward and incentive systems, their disciplines, their faculty members and so on. My conclusions are however the same: "change is mandatory, survival is optional, we have to choose wisely," to quote the late François Tavenas, ex-rector of Laval, in concluding a colloquium on the impact of globalization on universities.<sup>1</sup>

I'll start (1) by looking at universities from a very broad perspective, (2) then examine key evolutionary trends and (3) finally, make a few remarks about SSHRC's transformation.

<sup>&</sup>lt;sup>1</sup> François Tavenas, "Universités et globalisation: à la recherche de nouveaux équilibres," in Gilles Breton and Michel Lambert, Globalisation et universités: nouvel espace, nouveaux acteurs, Presses de l'Université Laval, 2003, p. 255.

## Universities, Then and Now

The most immediate way for me to discuss the evolution of universities is to compare the world of academia circa 1975, when I was hired as an assistant professor of sociology, and the university world now.

My vantage point in 1975 was a pretty good one. I was hired into what was then a department with an exceptional number of foreigners which had gained huge prestige owing to the key role some of my older colleagues had played in the Québec Quiet Revolution. My vantage point in the present is also pretty interesting, since over the past 6 years at SSHRC I have had to become familiar with the traditions and modus operandi of all Canadian universities, from smallest to biggest, in all regions, French and English.

Let me examine universities from a very broad perspective first.

In its institutional form, as James Downey has argued,<sup>2</sup> the university is a trinity, simultaneously three incarnations in one. It is a corporation, a *collegium* and a community. The corporation has a Board, officers, employees, unions and clients, but no "colleagues". It has corporate authority. The *collegium* is the academic authority, with the traditions and structures that empower the faculty to control and conduct the academic affairs of the institution. And, finally, the university is physically a community of people with its material infrastructure of land, buildings, roads, sewers, communication and transportation systems as well as cultural and athletic facilities.

When I arrived at my university, it was clear that the *collegium*—the professoriate—had the upper hand, with the corporate heads merely serving and coordinating departments, faculties and research centres. The key discussions were around curriculum, selection of colleagues, the setting of academic standards for admission, promotion and graduation, teaching loads, the best way to structure faculties and so on.

A strange thing happened in the 1990s: a rebalancing of power towards the corporate side of the institution. Funding problems, faculty unionization, increasing government regulation, the perceived centrality of the university for the economy, all led to a greater presence of the corporation, and to the metamorphosis of the role of the university president from an intellectual leader and coordinator to a CEO, a global positioning agent, with fundraising as his or her core preoccupation.

Today, we begin to see the "community" side making some headlines, with the publication of surveys about students' satisfaction with the food, athletic facilities and more generally with life on campus. I do not have a clue where this later movement will end up, but I would suspect it will further reinforce the presence of the central administration.

Max Weber had predicted long ago the rise of instrumental rationality in the Western world, the ever-increasing power of bureaucracies over communities and *collegium*. This is the fundamental backdrop of everything we are going to talk about today. Universities are not any more—and will never be again—a collage of independent intellectual fiefdoms far from the play of daily events. They now find themselves on centre stage, a place where the nation strengthens its competitive ability, where discoveries are made, where people equip themselves for better paying jobs. They are right there, as highrises at the core of cities, "breathing" the same air and subject to many of the same pressures. They are no longer monastic cloisters outside the city walls.

<sup>&</sup>lt;sup>2</sup> James Downey, "The Consenting University and the Dissenting Academy: Binary Friction," presentation at AUCC general assembly, April 2003

<sup>&</sup>lt;sup>3</sup> See on this Bernard J. Shapiro, "Acting on Conviction: Universities at Centre Stage," *Canadian Speeches*, July/August 1997, 28-33; Marc Renaud, "Les universités de l'avenir: de la tour d'ivoire au marché public," in G. Gagné and J-P Warren, *Sociologie et valeurs: quatorze penseurs québécois du XXème siècle*, Presses de l'Université de Montréal, 2003, 378-393.

In parallel to this "corporatization" of universities, something else, equally fundamental, has occurred: the fabulous growth in knowledge, both basic and applied, coming from the natural sciences. With the promises of the natural sciences being more concrete, more visible and better financed, the old ideal, the old promises of building a better world through the social sciences and humanities began to lose its lustre. Human sciences have not been able to produce, at the theoretical level, the equivalent to fluid mechanics or genetics, nor, at a practical level, anything quite like the jet engine or heart transplants.

Although there have been very real breakthroughs in the human sciences<sup>4</sup>—from game and systems theories to psychoanalysis and social welfare functions—there is a sense that the human sciences are not that useful, that they are some kind of arcane and atherosclerotic group more preoccupied with debating methodological canons than acting on the fundamental problems of the day.<sup>5</sup> There is a sense that the humanities and social sciences have not lived up to their potential.

As a consequence, they have lost considerable status and prestige, not to mention their relative lack of research funding and the culture of poverty they now inhabit. This zeitgeist is well captured in one of David Lodge's academic novels where the fictional West Coast Professor of English, Morris Zapp, says:

I have a contract with Euphoric State that says nobody in the humanities is to be paid more than me . . . "Why restrict it to the humanities, Morris? said Swallow. "You have to be realistic," said Zapp. "Guys that can cure cancer or blow up the world deserve more than us literary critics." (*Nice Work*, 1988, p. 329)

This state of affairs is rather paradoxical when one considers that student enrolment in those fields has increased in absolute and relative terms over the last two decades and because ever since 1971 they are the fastest growing group in the labour market, with the exception of computer scientists. This is a second fundamental backdrop to what we are now going to talk about.

## Human Sciences, Then and Now

Both the corporatization of universities and the prominence of natural sciences have sent shock waves to the ways we conduct our business in the social sciences and humanities. The glory days are long gone for the stereotypical pipe-smoking English professor in his tweed jacket, with leather patches on his elbows, making timeless pronouncements on high culture or for the bearded sociology professor discussing the next phase in the dictatorship of the proletariat.

My argument will be that we are now way past the old debate between the so-called social sciences and the so-called humanities. I'll argue that the real debates are about the:

- role of disciplines in academe (multi-, cross-, inter-, or trans- disciplinarity);
- · place of group, team or network approaches to knowledge building;
- place of problem-, issue-, mission- or performance- driven research (also called targeted or strategic research); and
- place of knowledge transfer (mobilization, translation, management) in our scholarly undertakings.

<sup>&</sup>lt;sup>4</sup> See Karl Deutsch et al., "Conditions Favouring Major Advances in Social Science," Science 171 (1971): 450-459.

<sup>&</sup>lt;sup>5</sup> There is a quite voluminous literature on this topic. See, for instance, the editorial in the September 2003 issue of the *International Social Science Journal* published by UNESCO, 370-376; Gilles Paquet, Governance through Social Learning, University of Ottawa Press, 1999, especially chapter 10; Robert Lacroix's address to the 2000 Convocation ceremony at the Université de Montréal, (*Le Devoir*, 31 mai 2000).

These issues were non-existent when I took my first university posting; they are now overwhelmingly present.

Let me capture this another way, by taking you on an imaginary tour of La Sorbonne in Paris. In the court-yard, to your right you'll see the statue of Louis Pasteur, the glory of French bio-medical sciences; to your left, the statue of Victor Hugo, the humanist par excellence. If you walk outside of La Sorbonne onto La Place de la Sorbonne, you have another statue, this time of Auguste Comte, the founder of French social sciences. He is outside La Sorbonne per se because social sciences were in the 19th century the new kids on the block who had not proven themselves.

Ever since C.P. Snow launched in 1956 the debates on the two cultures of academia—that subsequently evolved into a debate about the THREE cultures of academia—there have been countless articles and books published on the topic. I reread a lot of these in preparing this talk and I think we are now way past such discussion.

I am NOT making the case here for some kind of mythical "unity of knowledge" whereby the human mind would transcend all the differences between the natural sciences, the social sciences and the humanities. I am just observing that this debate has not much ground to occupy anymore. The variance within disciplines is now larger than that between disciplines. The economist who is a quantitative modeller has more in common with the mathematician than with the economic historian. The qualitative sociologist has more to do with philosophy or literature than with the quantitative sociologist, who may feel closer to the scientists who have sequenced the human genome.

As a sociologist myself, I feel entirely comfortable being labelled a HUMAN scientist if we re-empower the word "science" with its French meaning, that of disciplined curiosity and of discovery. Being called a "human" scientist even gives me a much better sense of mission than being called a "social" scientist does. It gives me the sense that I am part of a larger enterprise not only to understand the world as we have built it, but also to decipher the human soul that inhabits it. It allows me to tackle, head-on, issues—such as privacy, accountability, poverty, learning, even competitiveness—that I can't address well using only sociological theories and methodologies.

The issue is not any more, "Where should we install the statues of Pasteur, Hugo and Comte?" The issue is not, "What is the share of the humanities and what is the share of the social sciences?" We have to progress beyond these preoccupations. The real issue is, How should we structure our approach to knowledge development in the future? How can we get Hugo and Comte to strike an alliance to make sure the "human" sciences deliver as much to the world as the "natural" sciences of Louis Pasteur have done?

To begin to answer this question, we have to examine one by one the four things that I mentioned earlier (multidisciplinarity, teamwork, problem-focused research and knowledge transfer) and that have emerged as fundamental issues only over the last quarter century.

<sup>&</sup>lt;sup>6</sup> See, for instance, Wolf Lepenies: Les trois cultures, Editions de la Maison des sciences de l'homme, Paris, 1990 (published in German in 1985); Immanuel Wallerstein et al., Open the Social Sciences: Report of the Gulbenkian Foundation Commission on the Restructuring of the Social Sciences, Stanford, Stanford University Press, 1996; Henry Moss: "Unity of Knowledge, circa 2000," Annals of the New York Academy of Sciences.

# Multidisciplinarity

Once upon a time, to make a long story short, there was theology, law, medicine and philosophy. Most humanities disciplines branched out of philosophy with an idiographic, interpretative epistemology. Later, most social science disciplines branched out with a nomothetic, law-seeking epistemology. Other cleavages set in: the past (history) versus the present; the Western World versus the rest of the globe (anthropology); and the logics of the market (economics) *versus* those of the state (political science) and the civil society (sociology).

The "original" disciplinary clusters flourished for more than half a century, with a clear sense that each discipline had a core, "forging" the intellect in particular ways very distinct from one another. There were discipline-specific theories and methodologies that allowed people to know what differences there were between political sociology and political science, between political economy and economy, between the kind of economic history taught in economics departments and the economic history taught in history departments.<sup>7</sup>

Mind you, there were ideological fights within disciplines. Economics tended to manage them like the Catholic Church by forming individual "religious orders" within the mother Church. Instead of Jesuits, Benedictines and so on, you got "neo-liberals", "neo-Keynesians" and so on. In sociology as, I guess, in most humanities disciplines, the behaviour was more Protestant, a schismatic splitting-off of new approaches into "schools" (e.g., Marxism, structuro-functionalism, post-modernism), without apparent attempts to situate them inside the larger disciplinary fold. Other disciplines, like political science, resembled more the tradition of Platonism, every debate being subsumed under an idealized reality of pure types (e.g., "democracy"), none of which ever manifest completely in this earthly, imperfect world.8

But, all in all, disciplines made sense with their own required reading lists, cultural heroes, traditions and deeply-enforced loyalties. So much so, in fact, that they—the *collegium*—all got institutionalized into "corporate" structures of various kinds: departments, scholarly associations, degrees, journals, even library classifications. While disciplines may have lost some of their core resonance, their core theoretical substratum, their "corporate" structures continued to control entry into the discipline, award prestige and govern career advancement in the scholarly hierarchy.

When I entered academia in 1975, this was my world. I was a sociologist. I thought I knew what that meant and I was proud of it! Since then, well, the world has changed.

We enter the 21<sup>st</sup> century with considerable uncertainty about the validity of disciplinary boundaries. Several of my colleagues have ceased calling themselves sociologists as they migrated to business schools, faculties of education or medical schools. A lot of "poaching" has occurred across disciplinary boundaries, hence blurring the distinctions of the past. Other colleagues have migrated to research centres or advanced research institutes because the quality of their research depended on rubbing shoulders with people from other disciplines. Still others created transient groupings or networks, all organized without reference to disciplinary boundaries.

<sup>&</sup>lt;sup>7</sup> I rely a lot here on the magnificent work of Immanuel Wallerstein. See his *Open the Social Sciences* cited above. See also his various papers available at http://fbc.binghamton.edu/iunesco.htm or http://fbc.binghamton.edu/iwpradfp.htm.

<sup>&</sup>lt;sup>8</sup> For more analogies on religions, see Neil Smelser, "Organizations in the 21st Century: Knowledge and Learning—the Basis of Growth," November 2001, <a href="http://www.global-insights.com/WZB/smelserr.htm">http://www.global-insights.com/WZB/smelserr.htm</a>.

In parallel, university administrations had to find ways to respond to new demands for knowledge on women, on ethics, on culture, on population health, on child development and so on. These demands straddled the emergence of two other pressures: a constantly expanding student base, on the one hand, and tightening financial resources, on the other. The new demands that came before that double crunch resulted in new departments (e.g., industrial relations, communication studies); those coming after resulted in a proliferation of cross-disciplinary programs (PhDs in applied social sciences, bio-ethics, cultural studies, and the like).

The paradox is that, even though disciplines have lost a lot of their past meaning and lustre and despite the migrations and organizational reshuffling, traditional departments remain quite strong organizationally. In fact, they still have virtually "life and death" power over people's careers.

What does the future hold in store?

- A growing importance of professional schools who integrate knowledge more easily because of their applied focus?
- The creation of more "outfits" outside of universities (think tanks, institutes of advanced research) to better pull the pieces together?
- A much higher incidence of cross-appointments?
- A wholesale restructuring of the division of labour within universities, possibly the disappearance of traditional departments and the emergence of smaller faculties?

Nobody knows for sure. Probably, a combination of all of the above to some degree. The question is how and when we will get there, and with what effect.

### Team work

As someone pointed out to me recently, "There is no limit to the amount of nonsense one can produce by thinking too long alone." In an often quoted *Science* article in the early 1970s on the 62 major advances in the social sciences since 1900, Karl Deutsch and co-authors identify an unmistakable trend: more and more, real breakthroughs derive from collaborative research. The "great man" or "lone wolf" tradition will continue to produce a significant number of new ideas, but overall it will be of secondary importance.9

Furthermore, as we have witnessed in Québec more than anywhere else in Canada during the 1980s, there is a growing demand on the part of governments for universities to create stable centres of expertise on this or that topic, centres with the critical mass to survive the departure of a founding individual and able to create graduate student training environments that are akin to that of the laboratory and hence improve the rate as well as the quality of degree completion.

Such a development may sound like anathema, or worse, to colleagues in the humanities where intellectual traditions remain much more individualistic than in the social sciences. And yet, there is a "cri du coeur" emerging from several humanists to give teamwork another, more positive look.

<sup>9</sup> Karl Deutsch et al., op.cit.

Listen to this recent comment in *The Chronicle of Higher Education*:

What if the humanities adopted a different model for intellectual interchange? Imagine if ideas in the humanities evolved not in response to public—and adversarial—diatribes in magazines, journals and conference panels, but in a regular, even routine, manner, the equivalent of a science laboratory. In a lab—or at least the platonic ideal of a lab—discovery of one sort or another is the **shared**, overt goal . . .

The humanities could borrow from the collaborative model of the lab, where even the most senior and junior members count on one another, and where joint publication and grant applications acknowledge and formalize a structure of mutual dependency. The Oedipal "anxiety of influence" so championed by humanists is counterproductive for both junior and senior members . . ." (Cathy N. Davidson, "What if Scholars in the Humanities Worked Together, in a Lab?", *Chronicle of Higher Education*, May 28th 1999).

No matter how brilliant and creative, there is no way a solitary thinker could puzzle through the complex issues of today's world as deeply and comprehensively as a group of people from different fields, different areas of expertise, different disciplinary training and perspectives, and spanning several generations.

The difficulty now is figuring out what this all means for academic work. As I kept telling my students who were constantly asking for collaborative term papers to be accepted, "Life is lived individually and I want to see what YOU know and think." Collective undertakings cannot supersede the need to make a contribution that is specifically one's own. I am still flabbergasted when I see a CV that lists not even one single-authored publication. Yet, collective work can make a huge difference in terms of its overall depth, breadth and impact. This is the quandary: Do we pursue more group work with perhaps less recognition to individual scholars or stay with the status quo? If more group work, how far should we move in that direction? What incentives should be put in place? How should group work be controlled and recognized in terms of signature protocols, copyrights, promotions, and so on?

### Problem focussed research

The fall in status and prestige of the human sciences has had a profoundly perverse effect on the state of public opinion as well as on its decision-making. Inadequate attention to human sciences—which, I agree, is partly a result of the very problems of those fields—has contributed to making human problems seem beyond the reach of human understanding and redress. When "common sense"—often no more than prejudice and superstition—holds more sway than solid evidence and debate, we court a huge risk of error and a grave decline in the quality of democratic life. 10

In developing a rigorous system of "excellence" based on disciplines, departments, and peer-reviewed journals and awards, the human sciences have established what one could call a "cordon sanitaire" between themselves and the vagaries of common sense. Such a system is needed to guarantee reliable quality standards. At the same time, this cordon sanitaire has had certain negative consequences. For example, by reinforcing the use of highly specialized language, the human sciences have sometimes excluded themselves from important public debate. Also, preoccupation with peer opinion has tended to quarantine the research community from the "microbes" of the outside world and weakened its ability to grapple with them. As a result, "knowledge for knowledge's sake," once viewed as fundamental to the human quest, is now viewed, in certain circles, as a waste of money, time and effort.

<sup>&</sup>lt;sup>10</sup> See on this the September 2003 editorial in *The International Social Science Journal*, op.cit.

In parallel, governments have switched from a rowing to a steering model. As part of downsizing, governments have tended to curtail their own research capacity in favour of outsourcing, both in the natural sciences and in the social sciences and humanities. They are now—and this is certainly true in Ottawa—looking for ways to improve the evidence base for informing policy and creating new policy-research interfaces. Better policy research does not automatically produce better policies, but good research can certainly assist sound policy and is almost a precondition in some areas.

There is now a huge demand for problem-oriented research, both basic and applied, to help better understand and possibly solve certain problems. This has been labelled "mode 2" research, 11 i.e., research operating in a context of application where the issues are defined and the research organized for a particular context of application articulated outside the discipline or the field of research. There is a whole string of synonyms for such work: mission-oriented, issue-focussed, impact-driven, strategic, or targeted research and even, in the case of fine arts or literature scholars, performance-driven research. Such research is almost inevitably interdisciplinary, requires strong networks and teams as well as a keen sense for alliances and partnerships.

All granting agencies in the world have pushed the envelope for this kind of research to take hold. What SSHRC does with its Initiative on the New Economy, with Metropolis, with its Community-University Research Alliances, with multiculturalism, federalism or illiteracy are all efforts to stir existing knowledge resources to combine and recombine in order to tackle pressing practical issues. International organizations such as OECD and UNESCO repeatedly have made the plea that such research should be developed on a world scale, with a partnering of universities in the north and universities in the south.<sup>12</sup>

All granting agencies in the world have no choice but to channel more effort in this direction. Mode 2 research however still hits considerable resistance in academia. There is a perception that some sort of Orwellian State is emerging that will drive certain research agendas and totally forget about others. There is a fear that the whole granting system will be hijacked by short term politically salient issues, to the detriment of other questions that may well become central 10 or 20 years down the road but where the research capacity has to be developed now. There is also a concern that some disciplines—particularly in the humanities—are extremely ill served by such approaches.

The answer is, of course, balance—balance between basic, untargeted, totally initiator-driven research and targeted research, basic as well as applied. But the enormously difficult question is: What is the appropriate balance?

# Knowledge Transfer

In his 1959 address to the American Sociological Association, Talcott Parsons—the best known American sociologist of the 20<sup>th</sup> century—declared that as a scientific discipline, sociology is "clearly primarily dedicated to the advancement and transmission of empirical knowledge" and only "secondarily to the communication of such knowledge to non members." 13

<sup>11</sup> M. Gibbons, C. Limoges et al, *The New Production of Knowledge*, London, Sage, 1994; see also M. Gibbons, "L'avenir de l'enseignement supérieur dans un monde globalisé," in G. Breton and M. Lambert, op.cit., 117-128.

<sup>&</sup>lt;sup>12</sup> Ali Kazancigil, "Strengthtening the Role of the Social Sciences in Society: The World Social Science Initiative," in *International Social Science Journal*, September 2003, pp. 378. See also "Lisbon Declaration on Social Sciences in Society: a New Partnership," November 8, 2001; "Vienna Declaration: the Social Sciences and Public Policy in the 21st Century, Towards a New Agenda," December 9-11 2002.

<sup>13</sup> Quoted, in a proposal to the American Sociological Association, by B.J. Risman from North Carolina State University.

This is also the way I thought when I first began teaching. I did not see as part of my job the task of translating and communicating knowledge to a diverse array of different publics. Personally, what changed my views was first my involvement in an inquiry commission in Québec and second, my work with the Canadian Institute for Advanced Research (CIAR) where Fraser Mustard simply did not give CIAR fellows the option of not being public.

I am quite convinced that more and more academics have also felt over the years the pressures of being responsible not only for their students and their university, but also for making sure they share their expertise or research results with much larger audiences. The pressures for knowledge transfer in the human sciences are functionally equivalent to the pressures for commercialization in the natural sciences. We have a duty to enhance public discussion, understanding and debate. Our research questions, as well as our research results, must be brought into the professional and public domain if they are to achieve their full potential to inform and benefit the public good. For knowledge to be used, it must be shared and, contrary to old norms, the new wisdom is that the more it is shared, the more its value grows.

Social sciences and humanities may need greater exposure to the noise of the marketplace and the public square, a closer connection to the issues and concerns of the day, for them not to become dulled by insularity and deemed irrelevant by the public that is essential to their ongoing support.<sup>14</sup>

Such thoughts are fodder for a revolution in the world of academe and we are only at the beginning.

Few universities see knowledge transfer as an integral part of their core mission. They have come to emphasize it in the natural sciences because there is money to be made from commercializing research and because the federal government has tied its funding for indirect costs to commercialization performance. But thus far nothing equivalent has emerged for the human sciences, except perhaps in Québec. The widespread impression is that today's mass media, particularly English-language publications other than the Globe and Mail, do not routinely look to academics to prepare articles that clarify the complexities of an issue or provide background information putting the issue into broader context. Compared to the US, Canada has fewer think tanks and knowledge-based foundations to mine, integrate and move knowledge out when needed. And Canadian human scientists are neither trained nor particularly good at asking themselves the difficult but essential question: "So what? What does my work mean for the people out there in the rest of society?"

At SSHRC, we see thousands and thousands of so-called "research dissemination plans" in a given year, but they almost invariably mean only talking to colleagues within the sacrosanct republic of science. Getting recognized by peers is what gets academics promoted, so that's where they put their efforts.

What will force this knowledge "mobilization" to happen more and more is the information revolution. What has changed most radically in the world of research over the last decade are the technologies of dissemination and access. It is now possible to collect, process, stock and disseminate enormous quantities of data in ways hitherto unimaginable. Although there are still issues around cross-national data standards and protocols, the fact is we can link existing databases in many fields in different countries and carry-out large scale, integrated, comparative analyses. We can create virtual laboratories that link up large numbers of research teams on a worldwide network, such as the experiment the NSF is undertaking on violence, linking up people from psychology, criminology, economics, statistics, biology and literature. And, above all, we can build communities of practice and not just share knowledge but get it to evolve more rapidly.

<sup>14</sup> See for instance, N. Cantor and S. Scomberg: "Poised between Two Worlds: The University as Monastery and Marketplace," Educause, March-April 2003, 12-21.

<sup>15</sup> D. Norris et al., "A Revolution in Knowledge Sharing,", Educause, Sept-Oct.2003, 15-26

According to recent estimates, there are approximately six million Americans that go online each day in search of information about health and disease. People are now building comparable systems on education issues, on micro-economic trends, even on poetry that lends itself to use on special occasions such as celebrating a marriage or giving a eulogy. Whether we like it or not, this is the new reality that we academics and SSHRC have to deal with.

#### SSHRC Transformation

For organizations reputedly impervious to change, universities have undergone their own "quiet" revolution since the mid-1970s, with the restructuring of their lines of authority, the rise of the natural sciences, the blurring of disciplinary boundaries, the generalization of the lab model, the emergence of new alliances and partnerships to tackle complex issues and the new emphasis on knowledge sharing and usefulness.

These trends are here to stay. Mind you, some balancing will occur over time. For instance, some American universities are beginning to wonder if they haven't pushed the emphasis on multidisciplinary approaches too far. They are concerned that something is being lost by not encouraging young scholars to master the traditions of disciplines and their stores of organized knowledge. Some institutions are starting to encourage careers according to the "T" model—that is, careers that would first go deeply into a chosen discipline and then, over time, embrace a broader spectrum of issues by drawing down on multiple disciplines. Also, with student training remaining the primary responsibility of universities, some are starting to view the pressures for research performance and knowledge transfer as potentially counterproductive, as they induce professors to move away from teaching as much as they possibly can. Some even wonder if universities have not essentially "sold their soul to the devil" by being too embroiled in the activities of the world and not maintaining enough of a distance to deliver a strong performance in their traditional and still important role as society's critic.

So, in a word, the reality of those trends is unquestionable, but nothing about them is either simple or neatly linear. Universities must adjust and change; otherwise they will not survive. And it's no use to recite the comforting line that universities always survive! That idea is a myth born of hope not experience. To be sure, institutions such as Oxford, Cambridge or La Sorbonne have long weathered the test of time, but many, many more universities have disappeared from the face of the earth over the centuries. In 1800, there were as many "deceased" universities as there were then still existing. Today, there is even a web site for orphan alumni in the US (<a href="https://closedcollege.bizland.com">https://closedcollege.bizland.com</a>). It lists more than 200 colleges that have closed since 1970.

The document we have circulated on the subject of SSHRC's transformation does not delve into these trends in any explicit way. They are recognized as a given. Universities are changing, and SSHRC has to help them and must change itself as well. The document asks where SSHRC should go, with several examples of potential programs to support research in ways that SSHRC has never thought about before, let alone tried.

SSHRC, we feel, has to go from being active only at the front of the research process, through its peer-review adjudication mechanisms, to also being very active at other stages—especially to make sure that knowledge is shared and has impact wherever impacts are needed (on public opinion, governments, business, mass media, education systems and other spheres). The transformation document posits that SSHRC should go beyond being a very good research council and become a full-fledged knowledge council.

To do so, the document suggests that while we must all continue to value research excellence, inclusiveness, and competitive funding, there is also a need to really value the outcomes of research beyond the traditional outputs in academic journals and conferences.

There are two new values that need to be looked at. The first is pretty specific to the geographical and multicultural nature of Canada: the need to value the interactive engagement, connections, among researchers and with knowledge users across the country and the world. The second is even more ambitious: to make sure our \$200 million investment in human sciences makes a difference and has a demonstrable impact.

The document then goes on to list possible new models of research support:

- Some build on all four of the trends we have discussed (multidisciplinarity, team work, problem-focussed and knowledge transfer): confederations of learning (CIAR model), institutes (CIHR model), in particular.
- Some push further the idea of knowledge transfer (knowledge mobilization units in universities, web-facilitated communities of practice, clearinghouse for advanced expertise, scholarly-based journals for lay audiences).
- Some would support team-based approaches to student training (enriched and connected post secondary training grants).
- Others reach for new ways to identify problems requiring better scholarly understanding (exchange-mobility programs and a human sciences foundation).

What we are looking for are ideas for the future and a certain consensus on what SSHRC should strive for. None of this will be operational tomorrow morning, as increased funding will be needed to implement some of the options. Choices will have to be made and priorities agreed upon, as there will never be unlimited money for human sciences research or any other kind of research for that matter. Where and how far should we move? How definitive should we be? When? Using what means? Those are the questions on the table.

Because of what technology now allows us to do, because of the global society's need to understand itself, because of the profound turbulence experienced in universities over the last 25 years, we feel that the time has come to get going.

The 21<sup>st</sup> century may well become the century of the human sciences, as the 20<sup>th</sup> was the century of medicine. For this to happen, human scientists have to be at the heart of a networked nation and not just disseminate their knowledge. They also have to make sure that they know each other and that their knowledge has impact. At heart, these two values are what SSHRC transformation is all about.