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ISBN 0-315-53819-8

A CRITICAL ANALYSIS OF THE CONCEPTUAL APPROACHES TO
THE STUDY OF THE FUTURE OF HIGHER EDUCATION:
ONTARIO AND CANADA

A MASTER'S THESIS PRESENTED
TO THE SCHOOL OF GRADUATE STUDIES
AND RESEARCH
OF THE UNIVERSITY OF OTTAWA

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334155

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ABSTRACT

A Critical Analysis of the Conceptual Approaches to the Future of Higher Education

In light of the emergent political will for reform of the post-secondary education system and its financial allocation process in Ontario and Canada, it seems appropriate and necessary to focus on the conceptualization process of governments concerning what they perceive to be the crisis in post-secondary education and what they consider as solutions for the future of higher education. As well, it seems necessary also to focus on the main political forces, events and people, which influence directly or indirectly the policy-making process of post-secondary education in Canada and in Ontario. It is necessary because this process of conceptualization will determine the type of higher education system that will exist in the future. It seems appropriate to subject this process to critical evaluation.

It has become apparent that for most interveners, governments and groups alike, the crisis of post-secondary education has to do with its increasing inability to provide society with the required knowledge and training necessary in a modern industrialized society entering the 21st Century. The crisis of relevance of higher education is directly related to the fact that the creation and expansion of the

post-secondary system since the 1960s has forced it to be politically accountable to the public policy priorities of the governments who allocate the financial resources to the institutions of higher education, universities and colleges.

The perception of the crisis as one of relevance predominates the present day dialogue and discourse on the subject in Ontario and Canada. Also, given the increased importance of higher education issues in the last few years, in both the provincial and federal political scenes, this particular perception of the crisis has led to some sort of consensus on the future of the post-secondary education; that is, higher education will have to become more and more relevant to the political priorities of the day, the most important of which is "economic development". This perspective, which seeks integration of research and teaching with the productive processes of the province and the country, we refer to as the "industrial/functional" approach.

Thus, the predominance of the "paradigm of relevance" in understanding the crisis of post-secondary education has direct consequences on the type of solutions offered to remedy the situation. It leads to an increasing willingness to link educational requirements with the economic requirements, as dictated by the political agenda and priorities of the day. But this approach is both inadequate and paradoxical; it is, in fact, a part of the crisis in itself. Further integration of higher education into the

political and economic priorities has, in itself, lead to the crisis that the universities are facing today. Indeed, it is the creation of a public post-secondary education system, which forced higher education in the public realm of political things, that is at the origin of the real crisis.

It is interesting to note that although the industrial/functional approach predominates, there exist in the discourse of many, who are directly or indirectly involved with the higher education sector, contradictions in their definition of its essence and nature. That is, there exists a paradox in definition which attempts to reconcile the critically and culturally independent nature of education with the immediate and technical needs of the economy. Under the guise of the "balanced-approach", these interveners appear to have contradictory definitions of higher education. It is from this paradoxical definition that a critique of the industrial/functional approach can be made.

The inadequacy of the paradigm of relevance to the crisis of the post-secondary system and the industrial/functional approach to the future of higher education stems from the fact that it fails to recognize that the crisis of post-secondary education is but a microcosm of the crisis of society. In essence, society is undergoing a period of intense stress where resources are being depleted and where social thought and reasoning reinforce this depletion. In other words, although the possibilities for

human emancipation and authentic freedom are greater than ever, actual patterns of development are forcing mankind to suppress their desires for the sake of efficiency. In this context, higher education or education as a whole, rather than constituting an essential element of freedom, becomes an instrument for further integration of human action and rationality into the logic of the productive processes; thus it is becoming an instrument of further repression.

I would like to dedicate this study to my mother, Lucienne Carlos, because if it were not for her lifelong sacrifices to ensure that I get the best education possible I would never have been able to produce this paper which is, for the moment, the culmination of all my years of study. Secondly, I would like to thank Duncan Cameron, my thesis director, for the help and support he has provided me over the last two years, and this even though Duncan happens to be a very busy man.

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LIST OF ABBREVIATIONS

UCC	Association of Universities and Colleges of Canada
Bovey Report	The Commission on the Future Development of the Universities in Ontario, 1984
CAUT	Canadian Association of University Teachers
CFS	Canadian Federation of Students
CHERN	Canadian Higher Education Research Network
CEGEP	College d'Enseignement General et d'Etude Professionnelle
COU	Council of Ontario Universities
Fisher Report	The Committee on the Future Role of Universities in Ontario, 1981
Macdonald Report	Royal Commission on the Economic Union and Development Prospects for Canada
MCU	Ministry of Colleges and Universities
OCUA	Ontario Council on University Affairs
OISE	Ontario Institute for Studies in Education
OECD	Organization for Economic Cooperation and Development
PSE	Post-Secondary Education
SSHRC	Social Sciences and Humanities Research Council
URIF	University Research Incentives Fund

INTRODUCTION

In light of the current emergent political will to reform the post-secondary education system in Ontario and Canada, it seems all the more appropriate to undertake a study of the dominant conceptual approaches, in regards to the future and direction of higher education, this as we undertake the last stretch of the 20th Century and head into the 21st. In essence, we are concerned with the dominant perception of the crisis of post-secondary education and the impact of this perception on the conceptualization of the future of higher education.

Indeed, it is apparent that the governments of Ontario and Canada are resolved to reform the system of post-secondary education, especially in light of new priorities in the economy and in research and development potential and, also, in the face of the emergence of strong political forces seeking the improvement of the system. It seem that governments intend to overcome what is perceived to be a crisis of relevance of post-secondary education by rendering the system, its institutions and its financing structure, more efficient and more in line with what they consider are the real needs of society.

It is this interpretation of the crisis of higher education and the determination of the real needs of society that shape our "problematique". It is becoming increasingly

popular to perceive the crisis of higher education as one where the post-secondary education system fails to serve for the building of a strong economy; we refer to this interpretation as the "Paradigm of Relevance". As we will see, this paradigm serves as an explanation for many interveners acting directly or indirectly in the higher education domain. Likewise, the industrial/functional approach to the future of higher education that emerges from this paradigm constitutes the second preoccupation. This approach seeks to find and apply solutions in order to render the system more efficient, thus more relevant to the real needs of society.

But is the paradigm of relevance adequate in explaining the crisis of higher education? And second, does the Industrial/Functional approach to the future of higher education, that is derived from this paradigm of explanation, really satisfy the authentic and more holistic present and future requirements of society and of the individuals that constitute it? Finally, are there not alternative interpretations of the crisis of the post-secondary education system, and conceptual approaches to the future of higher education? In this study, we do not seek to answer those questions fully. Rather we seek to demonstrate how the paradigm of relevance applies, and how the Industrial/Functional approach emerges as a result. But in doing so we attempt to demonstrate that both the paradigm

and the approach are paradoxical, and often antithetical to the essence and nature of higher education as a concept and to the authentic needs of people. In this context, what begins as a perception of a crisis rapidly deteriorates into the re-reorganizing higher education to strengthen the status quo.

Thus, in what follows, we have attempted to methodically scrutinize a good deal of the literature produced by governments, groups and individuals, acting in the domain of post-secondary education in Ontario and Canada, since the early 1980s. It is by analyzing this literature systematically that we have discovered the dominant conceptual trend in interpreting the crisis and in providing solutions to it.

The pertinence of such research stems from the fact that the post-secondary education system in Canada is fast becoming a "hot" topic politically; and that, since the beginning of the 1980s the debate on the future of higher education has involved an increasing number of interveners that seek to influence the direction that governments takes in regards to higher education. This has direct and fundamental consequences in perceiving and planning the future of Canada.

Context

This study becomes all the more relevant when superimposed to three very important contextual levels: first, the philosophical and ideological level; second, the political, economic and institutional level; and finally, in the context of the difficulties that the system presents to the student-- an analysis of this kind would be futile if the interests of those people who experience the system were not taken into consideration.

The first contextual level implies values, interests, attitudes, and ideologies which ultimately shape the process of policy-making in higher education, and in all other areas of societal significance. In this context, it is a matter of recognizing the increasingly expressed need for alternative philosophical pillars upon which the future of society can depend and subsist. It is a matter of recognizing the on the inadequacy of traditional social and political thought, be it left or right. Finally it is a matter of recognizing the imminent danger that the earth faces as a result of the polarization of the dialogue; a polarization that has had major consequences militarily, economically, politically, and socially. The institutions of higher education in Canada and in Ontario are not immune to what is happening around the world. In fact, their fate,

as is the fate of everything else, is directly influenced by this turmoil.

Furthermore, it seems that the essential elements of a conscious civilization, those of self-definition, identification and expression, are torn between this mythical stability of the established orders and the will for ill-defined progress. Utilitarianism, materialism, and positivism have strained the ties of civilization, depleting its resources and diminishing its ability to cope with the present and plan for the future.

Nevertheless, the dialectical process between the old and the new, the innovative and the conservative, progression and regression, and essentially between "what is" and "what should be" is still at play. It is from this process that dialogue and debate for change emerges, and it is this dialogue that shall we seek to analyze. The difficulty being that there are, within this context, different interpretations of change, and this is where the dialogue becomes more complex. In many cases, change has become a password, the key to political and economic success, and unfortunately too, though, the key to ideological indoctrination. Yet, the reality is that in terms of human and social progress much remains to be done; worse yet, there is less and less energy to do it with.

Much more could be said about this sad state of affairs where each side believes it is right, that it holds the

truth, the answer to true salvation. It is in this ideological context that we have attempted to study the dominant conceptualization of higher education in Canada, and more specifically in Ontario

The second contextual level is concerned with the very practical changes of post-industrial society and their impact on the ability of governments to adapt, as well as the movement of higher education from being a private affair originally to one where it entered the public realm. Our study of the conceptualization process falls inevitably within the context of the very deep-rooted economic, social, institutional and technological transformations that Canadian society has undergone and will continue to undergo.

Here, as in everywhere else in the world, the information revolution is transforming the way we satisfy our needs, altering our vision of work as well as altering the relationships between individuals, and between the individual and the collectivity. Without going into details for now, very tough questions must be asked, and these, in a very different context than the one higher education found itself in some thirty years ago.

Indeed, fundamental to this discussion is the fact that higher education entered the public realm. It wasn't until the 1950s that higher education institutions in Ontario, the universities, began their great and rapid expansion that led to what we know as the post-secondary education system

costing the Ontario government nearly \$1.5 billion annually and costing the federal government nearly \$4.5 billion annually. The political and economic climate of the time facilitated increased public funding; it could always be justified for university education was considered an excellent asset in the economic strategy of the province, but unlike today, then the perception was that any type of education was good.

As public expectations and demand for university education grew so did the institutions, and the government purses that came along. Universities, although autonomous came to be more and more dependant on the budgetary allocations of the governments, and so there developed formal and informal relationships between the two. In Ontario, for example, this led to the creation of a Ministry of Colleges and Universities, an advisory agency known today as the Ontario Council on University Affairs, as well as other quasi-governmental agencies such as the Council of Ontario Universities. These developments serve to demonstrate the extent to which higher education entered the realm of the government. This fact implies greater accountability on the part of the universities and colleges of applied arts and technology, the institutions of the post-secondary education system. Furthermore, accountability has not only to do with financing but also with public policy orientation of governments. These

developments are crucial in understanding the "Paradigm of Relevance" and the conceptual approach to the future of higher education that emerges thereof.

In the 1970s and 1980s, the capacity of the post-secondary system of higher education came to be eroded for various reasons, the main of which was the increasing lack of funds. The erosion of the capacity of the higher education institutions to fulfill their stated tasks and mandate in the eyes of governments and other interveners is the main context from which this discussion emerges, for it is the attempt to understand what has come to be regarded as the crisis of post-secondary education and the attempt to offer solutions for the future of higher education which concerns us.

Finally, the third contextual level implies the experience of the student as he/she proceeds to get a higher education. It is often assumed that university and/or college education are indispensable tools for social mobility and access to better employment and salary opportunities. However, the reality is that students are consistently faced with rising educational costs, including fees and living expenses, while the education obtained seems to be increasingly inadequate, incomplete, specialized, and poor in quality.

The pressure on students is great for they must often make a very unholy choice between specialized education and training, which often signifies that the student becomes entirely dependent on forces beyond his/her control in the "real world", or general education such as arts, humanities and social sciences, which bring about great personal satisfaction but dooms the student for there are but few openings for those with general knowledge and no experience in the "real world".

The consequence of all this being that higher education per se is sacrificed for the sake of professional or technical careers where little room or time is left for formal and traditional philosophic and cultural education. It is as though the post-secondary system fails to breed wisdom; rather it seeks to produce educated parts to fit into the system. The problem being that those educated parts know less and less how they fit into the whole scheme of things where change has become a way of life.

Another problem is the socio-economic barriers to access for higher education. Although it is apparent that higher education should, as much as is possible, be provided to all, there are a great number of people who, although very capable, do not have the opportunity to elevate themselves through further education.

Finally, the essential point, at this contextual level, is the fact that with all the fuss about the relevance of

the system little concern is being given to the people themselves. It is as though it were more important to maintain, foster, and perpetuate the actual structures and institutions for their own sake than to make sure that it is the person's interest and needs that are stake. It is little wonder that so many students become disillusioned about their education at university and college.

Statement of the Problem

The problem is that the application of the "Paradigm of Relevance" to the crisis of the post-secondary education system and the industrial/functional approach to the future of higher education is inadequate and paradoxical.

It is inadequate for it assumes that the system must functionally serve publicly stated political objectives, where those objectives are determined by the dominant interests on the economic and political agenda. An agenda that is limited in scope and perspective, and where contradictions abound.

It is paradoxical because the essence and nature of education is greater in meaning and consequence than the political system that manages it. Politics and economics are a product of learning and teaching, not the other way around. In other words, the agenda of knowledge is beyond the political agenda. The Paradigm of Relevance and the industrial/functional approach as applied to the system of higher education, its crisis and its future, cannot suffice as rational and logical perspectives.

However, it seems that even those who recognize the greater needs and aspects of higher education have adopted a balanced approach to the crisis of higher education and to its future, for they are forced to act and think within the

only legitimate and politically popular paradigm and approach. This is another part of the paradox.

Analytical and Methodological Approach

Essentially, the purpose of this paper is to analyze the application of the "Paradigm of Relevance" as a way of explaining the crisis of the post-secondary education system; and to demonstrate how this paradigm leads to the emergence of the industrial/functional approach to the future of higher education as a way to resolve the crisis. The ultimate goal is to show how that this paradigm and this approach have come to dominate the political dialogue that has emerged recently, as higher education becomes an evermore popular topic of discussion. Finally, it will be proposed that this paradigm and this approach are inadequate and paradoxical, and thus impose limits to the debate on the future of higher education, in perspective and in scope.

Our study concentrates on the post-secondary education system in Ontario, that is, on the major conceptual approach that is present in Ontario. However, given the role of the federal government in higher education, as well as the emerging political will for a national system of post-secondary education, we have also taken into consideration the dialogue that goes on that level as well. In fact, although our case study is set in Ontario, and Canada

insofar as it is involved, the resultant conceptual products of our analysis can be generalized for the whole of Canada.

In Chapter 1, we will be analyzing the most important literature produced by the government of Ontario, its Ministry of Colleges and Universities, the Ontario Council on University Affairs, Committee and Commission reports, etc. This will permit us to demonstrate how the Paradigm of Relevance and the Industrial/functional approach dominate the Government of Ontario's interpretation of the crisis and its vision of the future of higher education. An analysis of the major steps taken by the recently elected Liberal Party since its coming to power will also provide us with further proof of the importance of this perspective on government thinking and action.

In Chapter 2, we seek to demonstrate how the emerging will for a national system of post-secondary education is the product of the paradigm of relevance and of the industrial/functional approach. The purpose of this chapter is to demonstrate how the Government of Canada and major interest groups perceive the crisis of higher education and what they envisage as a way to resolve it in the future. It should be noted there are discrepancies as to interpretations and conceptions of solutions amongst interested parties, but that those still fall well within the confines of the industrial/functional paradigm.

In Chapter 3, we are concerned with the views of university administrators, teachers, researchers, and the people of Ontario. It is in this chapter that we begin to observe the fundamental inadequacies of the paradigm of relevance and of the industrial/functional approach. These interveners seem to demonstrate a greater understanding of the essence and nature of higher education. We will attempt to discern the characteristics of an emerging paradox, because these interveners contribute to a "balanced approach" which is, essentially, an attempt at reconciling industrial/functional values to those greater values provided by the higher education sector in Canada and Ontario.

In chapter 4, we analyze the views of a large segment of those analysts who study higher education as a discipline in itself. We will see that, according to them, the burden of responsibility for the crisis of "relevance" of higher education should not be put solely on the shoulders of governments and of external factors, but on the shoulders of post-secondary institutions themselves for mismanaging their human and financial resources. Again, within this perspective, the analysts develop a balanced approach which seeks to reconcile industrial/functional interests with the more long-term intangible benefits and interests of traditional higher education institutions.

In Chapter 5, through the study of what is considered the crisis of the social sciences, we will demonstrate how, to a much greater degree than in any other of the four previous chapters, the balanced approach is paradoxical. It will be seen that in the case of the social sciences the paradigm of relevance applies in a very different way; that the conceptual approach to the future of higher education and the social sciences, a major component of higher education, simply cannot be subjected solely to the industrial/functional paradigm.

In Chapter 6, we will simply synthesize the arguments found in a recently published book on universities by Janice Newson and Howard Buchbinder entitled The University Means Business. The point of this review is to reenforce our conclusion on the predominance of the industrial/functional paradigm. The authors of this book, though, proceeded in a different analytical and conceptual fashion which in fact completes and corroborates our arguments and arrives at basically the same conclusion. The major point is that the industrial/functional approach is part of the crisis of higher education.

Finally, in the conclusion, as we retrace the argumentative analysis of the whole paper, we shall demonstrate the need for alternative paradigms of analysis and conceptual approaches by bringing insights from some classical works dealing with the crisis of education.

It should be emphasized that the basic idea behind such analysis as will be provided in this paper is to attempt to identify the dominant understanding of the crisis of the actual system of post-secondary education and to understand how this has an impact on the solutions proposed and considered by the governments in charge of making policy in higher education. This is an analysis of what is being said in different ways and in different forums in Canada. We do not seek to provide our own paradigm and approach, simply to criticize the dominant ones influencing the system today.

Finally, it should be recognized that there are definite analytical and logistical limits to this endeavour; for example, it is sure that an analysis of the dialogue concerning the whole system of education from primary to adult education would be even more appropriate. Unfortunately, this is simply not possible within the limits of this study. Nevertheless, it is believed that this paper makes a contribution in that it provides intellectual and empirical support to those who strive for a more humanitarian approach in the policy-making process in Ontario and in Canada in the domain of higher education. As well, for those looking to develop new and innovative approaches to the future of higher education, it is important to sort out the "Who Said What and Why". In this sense it should be particularly useful.

CHAPTER 1: CRISIS AND FUTURE OF HIGHER EDUCATION

In this first chapter, we will attempt to demonstrate how the paradigm of relevance to the crisis of post-secondary education takes shape, and how the industrial/functional approach serves as the dominant conceptual approach to determining solutions to the crisis and to the future of higher education in Ontario. As a starting point, it must be understood very clearly that it is the fact that higher education institutions have entered the public realm over the last thirty years which constitutes a fundamental premise in understanding the primordial significance of the role of the government of Ontario in this domain. As well, it must be understood that it is the provinces who have constitutional jurisdiction over education, thus the power to determine its future and its role.

This chapter we will attempt to establish and define the fundamental themes that will recur throughout the rest of the discussion. This being said, we will begin by illustrating the established objectives as stated by the Government of Ontario in the 1960s and 1970s, the period when it became apparent that it was to play a major role in the domain of higher education. Those stated objectives are the starting point of all evaluation of the relevance of the system of post-secondary education that emerged during this period.

Then, through an analysis of two of the most important Government of Ontario initiatives of the 1980s, the result of which were the Fisher Report of 1981 and the Bovey Commission Report of 1984, we will show what are meant by the paradigm of relevance and the industrial/functional approach. It will be seen that the dominant paradigm and conceptual approach are usually concerned with the structure of funding and with the management capacity of the system. These two themes are predominant in most of the literature dealing with the crisis and the future of higher education.

Thirdly, we will attempt to determine what are the analytical themes and vocabulary that have come to dominate the paradigm of relevance and the industrial/functional approach. Our analysis concentrates on three studies commissioned by Edmund C. Bovey, Chairman of the Commission on the Future Development of the Universities of Ontario. Although it is stated that the opinions of the researchers do not necessarily reflect those of the commissioners, it is evident that the language and the themes of these studies is symbolic of the main dialogue that has emerged concerning the crisis and the future of higher education.

Finally, there would be no point in discussing the paradigm of relevance and the industrial/functional approach if the dialogue remained just that, a dialogue. The significance of the paradigm and the conceptual approach is that it has become the basis for most government initiatives,

both at the provincial and the federal level, in policy formulation and action. Thus, it will be our task to demonstrate how this is so by analyzing most of the remedial actions taken by the Government of Ontario since the election of the Liberal Party in 1986.1

1- It should be noted that we understand post-secondary education as being the institutionalized form of higher education. The two terms do not necessarily mean the same thing; for the purpose of this discussion they will be used somewhat interchangeably. The reason for this will be made clearer as we proceed through this discussion.

1) Objectives of Post-Secondary Education

On July 20, 1981, the Report of the Committee on the Future Role of Universities in Ontario was submitted to William G. Davis, then Honorable Premier of Ontario. The Report also included the Preliminary Report of the committee entitled "The Challenges of the '80s". This report outlines the objectives of post-secondary education, though it was written for purposes of discussion only. It is also in this report that the paradigm of relevance and the industrial/functional approach begin to take a most definite hold on the perspective of understanding that the Government of Ontario gives itself.

In more concrete terms, the committee members were in charge of reviewing the development of the university system; of setting forth current objectives in operational terms; of discussing the degree to which objectives were being met; of outlining the relationship between objectives and funding levels; and of indicating the structural changes that might be considered necessary in the system at various funding levels.² In other words, the committee was concerned with determining the problems and the solutions facing universities in light of the objectives as they had been established with the development of the post-secondary

2- H.K. Fisher, chairman. The Report of the Committee on the Future Role of Universities in Ontario (Toronto: Ministry of Colleges and Universities, 1981), page 1.

education system. It was charged with determining the degree of relevance of the system. Thus, it can safely be deduced that the paradigm of relevance takes shape originally with the structured government requirements for analysis. From this point on it can be said that, for the Government of Ontario, higher education, institutionalized through the establishment of the post-secondary education system, performs a function and that its performance should be evaluated according to its perceived relevance with publicly stated objectives. This is an inevitable reality as higher education entered the public realm.

But what are those objectives? The committee, led by H.K. Fisher, reaffirmed the objectives as stated in an Ontario Council on University Affairs (OCUA) 1978 report entitled The Ontario University System: A Statement of Issues. These objectives were 1) to develop a more educated populace; 2) to educate and train people for the professions; 3) to provide study at the highest intellectual level; 4) to conduct basic and applied research including development and evaluation; and 5) to provide service to the community. Although noble, it is apparent that the objectives seek for a system that not only provides students with an education in and for itself, but that higher education has functional benefits for the polity.

This is further substantiated as the committee also reiterated the validity of the objectives for universities as established in 1967 by William G. Davis himself. Thus the establishment of a post-secondary education system should serve 1) the provision of skills and knowledge that will allow graduates to play a vital role in our society; 2) the promotion of the powers of the mind so as to create men and women with a love for learning and the motivation to seek new knowledge throughout their lifetimes; 3) the search for truth and new understanding beyond the frontiers of present knowledge; 4) the transmission of our common culture both to its student body and to the wider community; and, 5) the provision of graduates whose attitudes are consistent with the free society in which we live.³ As we shall see, this last objective is paradoxical. In the past, higher education often was at the center of critical thought challenging the established order. It was not necessarily designed to encourage conformity and adherence.

The long-term objective, as stated by the committee, of the universities and of the post-secondary education system as a whole, its "raison d'etre" is "to serve the public interest in a variety of ways derived from their primary focus on knowledge and learning...Ontario must look to a future of living by its wits... What is currently at stake is the universities' ability to serve Ontario and Canada."⁴

3- Ibid.; page 7.

4- Ibid.; page 7. 22

Never before had the purpose of higher education been so publicly stated as it was in the 1960s, '70s, and '80s. It is from these principles that the paradigm of relevance and the industrial/functional approach emerged as leading conceptual forces influencing and determining much of the present day debate on the crisis and the future of higher education.

2) The Paradigm of Relevance and the Industrial/Functional Approach

And so it was that in its preliminary report the 1981 Committee on the Future of Role of Universities in Ontario concluded that even though it is rich in resources and has an educated populace, Ontario faced stronger international competition; that investments in Research and Development (R & D) were found to be well below Canada's major international competitors.⁵ It noted a growing shortage of scientists, engineers, and managers as Canada attempted to become more competitive internationally.

In addition, due to increased enrolment of both part-time and full-time students, increased participation rate by the age group of 25 and over, which meant increases in number and sizes of courses and programs, the universities in Ontario suffered from a loss of flexibility to respond to fluctuations. It was also noted that there was a deterioration in the capacity of universities to respond to new needs in research "especially those that contribute to the development of Ontario".⁶

5- In 1983, Canada spent .34% of its gross domestic product on research in the higher education sector. It ranked 8th overall as a member of the OECD. Fisher Report, page 2.

6- Ibid.; page 13.

The report concluded that present levels of funding were inadequate if Ontario universities were to meet the publicly stated objectives... "Allocation mechanisms must be chosen with regards to policy goals and the expected level of funding"... "if we are going to remain competitive we must make an effort both to strengthen our research and development activities, and to ensure that results are carried through to commercially successful application".⁷ Thus, as is demonstrated here the problem is seen as one where the system is increasingly unable to fulfill the new demands being put on it. As well, it becomes apparent that to serve publicly stated objectives, is not only to serve functional interest but also economic interest; this is why we refer to the industrial/functional approach.

Within this approach, the committee suggested that, given continued fiscal restraint, the institutions will have to face rationalization and restructuring, which has to do with both the funding mechanism and the management of the system. In this process, the committee proposed that universities develop closer links with industry and government, as well as ways to encourage private support.

Up to then, it was generally accepted that university education served the greater purpose of society's economic growth and development, but universities had generally been relatively free to determine their own mission and academic

7- Ibid.; page 29.

orientation. It was believed that all higher education was good for the economy and the province. However, in the 1980s, beginning with the Fisher Report, it was becoming more and more apparent that this was not necessarily so; that is, that funding and management difficulties had come to hamper this ability in the short-term. Thus, emerged a greater willingness on the part of public authorities to direct, in one way or another, the course of higher education in order to fulfill the perceived greater economic needs of Ontario. Increased public funding and the need for accountability of these massive funds became the political justification necessary to pressure the PSE sector into the desired course of action.

In 1984, as a direct follow-up to the Fisher Report, the Commission on the Future Development of the Universities of Ontario was established under the leadership of Edmund C. Bovey. It was set up "to present to the government a plan of action to better enable the universities of Ontario to adjust to changing social and economic conditions."⁸

Circumstances in 1984 were not much different than in 1981, only they had worsened. Universities, according to the report, were exhibiting symptoms of increased stress, while public concerns mounted over the apparent inability of the

8- Edmund C. Bovey, chairman. Ontario Universities: Issues and Alternatives (Preliminary Report of the Commission on the Future Development of the Universities of Ontario, 1984), page 28.

universities to develop a coherent and effective plan to rationalize the deployment of available resources. Physical facilities of teaching and research equipment were deteriorating rapidly, to the point of becoming obsolete. Furthermore, there was continued inability to fund faculty in new and emerging fields of study. These particularities combined with slower economic growth and increased demands on universities for specialized research and highly qualified manpower, served to create the urgency necessary for a major commission of inquiry of the post-secondary education system in Ontario.

Quality and excellence having been established as priorities for the system, over accessibility, the commission was thus convinced the "there is an imperative need for our universities to respond to the impact of a new economic order and its associated technological requirements".⁹ According to the commission, the government should be considering the appropriate role of "highly specialized, designated-purpose institutes and the designation of specific universities as centres of specialization... with more clearly defined, different and distinctive roles".¹⁰

As should be expected within the bounds of the paradigm of relevance and the industrial/functional approach, the commission's inquiry respected the publicly stated objectives

9- Ibid.; page 3.

10- Ibid.; page 3.

of the OCUA's 1978 Statement of Issues, as well as those objectives expressed by William G. Davis in 1967. It is from these statements of objectives that the commission proceeded in their evaluation of the system and in their conceptualization of the future of higher education in Ontario.

The question was one of determining the system's ability given new political and economic realities: major considerations for the commissioners were 1) the rapid development of new technologies and the impact of the information and communication revolution and the advances in biotechnology; 2) the growing awareness within governments and the private sector of the importance of the relation between basic and applied research, especially related to national strategic needs ; 3) the shrinking nature of the world which increases the importance of international perspectives in all academic programs; and, 4) the increasing public expectation of the use of knowledge, etc.¹¹

Most importantly, a fundamental premise was that "Universities have become an integral component of the modern knowledge-based technology driven society and economy... University education has become too important to leave up to the universities. Our national well-being is at stake."¹²

11- Edmund C. Bovey, Chairman. Ontario Universities: Options and Futures (Report of the Commission of the Future Development of the Universities of Ontario, 1984), page 5.

12- Ibid.; page 5.

Higher education in the 1980s had become a part of the political system's priority process and agenda. It had to be made relevant to the needs of the province and of the country, thus relevant to the requirements and needs of the economy. Furthermore..."The urgency of reaching an internationally competitive level of excellence in higher education and research, together with adaptability to facilitate responsiveness to the needs of a rapidly changing society, set against the relatively broad access already achieved, requires a strategy which gives priority to quality and adaptability over the further enhancement of accessibility."¹³ The efficiency of the economic system has become more relevant than the proper education of the people. This is essentially the message of the commissioners.

As a result of this drive for efficiency, it is also the efficiency of the system in terms of funding and management that becomes important in order to render it relevant. Thus, the commission concluded that the government should encourage further differentiation in the roles of Ontario universities within a competitive context "influenced by incentives, in order to ensure appropriate concentrations of academic strengths in areas of international and social importance".¹⁴ It also called for "closer linkages with, and increased support from, the private sector for universities"... "these

13- Ibid.; page 5.

14- Ibid.; page 5.

are essential to facilitate not only the production of more technology as a direct result of new knowledge but its diffusion and application within industry".¹⁵

The industrial/functional approach to the future of higher education is further reaffirmed when the commission affirms that knowledge-intensive industries look closer to universities to serve their particular interests are seeking close links with academic centres of research. However, given that there are limits to the scope of research, universities must "be competitive within strategically chosen sectors of research... individual researchers become participants in international interaction that occurs among the vanguards in a given discipline".¹⁶ As a result "Emphasis should be placed upon a competitive system within which institutions are rewarded for the distinctive functions they perform and the quality of their activities".¹⁷ It is the economic context that should determine whether institutions are relevant, they should perform in an industrial/functional mode.

In the two reports, Bovey and Fisher, the basic mandate was to analyze the crisis in post-secondary education and to turn evasive ideals and objectives into applicable operational terms for the university system in the future.

15- Ibid.; page 5.

16- Ibid.; page 7.

17- Ibid.; page 14.

In other words, it was a matter of recognizing the problems that the system had in fulfilling publicly stated objectives and needs, thus in being relevant, and of determining ways to overcome this crisis by bringing the system closer to what are considered the needs and requirements of the economy of the province given a new economic international order. The analysis in both reports concentrated on two dominant factors; that is, the funding structure and the management capacity of the system. As we shall see, these themes are recurrent in most of the literature produced that deals with the crisis within the established paradigm of relevance, and with the industrial/functional approach to the future of higher education.

3) The Industrial/Functional Approach and its Vocabulary

Throughout these two reports, other than funding and management, there are several other recurring themes such as the economy, specialization, rationalization, concentration, public interest, budget restraints, international competition, market, research and development, quality as opposed to accessibility, etc... Regardless of the fashion in which they are being used, it is the fact that they are being used which concerns us here. The paradigm of relevance to the crisis of post-secondary education and the industrial/functional approach to the future of higher education most often contain these terms of economic consequence.

Most important are the influence of this paradigm and of this approach on the type of analysis and the vocabulary of that analysis that emerges whenever governments deal with the issue of the crisis and the future of higher education. The significance of this is the limiting scope and perspective in analysis characterized by the vocabulary to which these issues are subjected. Government commissioned analysis is most notorious for this type of analysis.

The study of three studies commissioned by E.C. Bovey forms the basis for these affirmations. It is interesting to note the dehumanized fashion with which the researchers deal with the issues at stake. Experience and interest is dealt

with in terms of numbers and equations. It is interesting to note that each study was produced by the Department of Economics and Centre for Industrial Relations at the University of Toronto. Needless to say that these studies had considerable influence on the theoretical orientation of the commissioners.

The first of these that we shall discuss is the study by Noah M. Meltz and David Stager entitled Universities and the Supply of Graduates to the Professions. The mandate of their study was to "consider the need for a process whereby adjustments can be made regularly to the resources allocated to professional programs".¹⁸ The focal point of their analysis is the cyclical nature of changes in graduation and enrolment. At the time of the study the percentage of Ontario students enrolled in professional programs was 40%.

The industrial/functional conceptual approach is best illustrated by their use of terms such as manpower policy which refers to a government's set of programs designed to improve the supply side of the labour market; manpower forecasting which is the systematic analysis of the future supply of and/or demand for labour; manpower planning which

¹⁸- Meltz and Stager, Universities and the Supply of Graduates to the Professions (Toronto: Government of Ontario, June 1984), page 1. Professional programs include education, law, medicine, dentistry, engineering, architecture, nursing, pharmacy, forestry, commerce or business administration, agriculture, veterinary medicine, social work, library science, and music.

combines the results of forecasting with the programs made available under a government's manpower policy.

Other terms such as labour market requirements or the demand for labour are used to study the question of professional programs. The former refers to the number of persons necessary for an optimum technical relationship or the achievement of a specific economic output; the latter refers to the idea that there is employment for a certain number of persons in a given occupation at a certain time, place, and salary level.¹⁹ Students are the instruments.

The researchers postulate that the use of each of these methods is very important because "a major (if not) most important motive students have in attending university is to obtain formal qualifications for employment... and one of the main reasons for public support of universities is their provision of highly qualified persons to the labour market".²⁰

In light of this, the rationale for public intervention should be based on the allocation of resources to their most efficient use... "The measure of the balance between costs of training and professional incomes is the rate of return on the student's investment in education".²¹ Secondly, public intervention in the supply of graduates serves to stabilize

19- Ibid.; page 5.

20- Ibid.; page 6.

21- Ibid.; page 10.

the behaviour of the market and "reduce the cyclical fluctuations in wages or salaries and unemployment due to lags in market adjustments".²²

Finally, the researchers conclude that "neither a laissez-faire nor a pure planning approach is appropriate... the universities need to monitor continuously the trends in labour market conditions for the occupations that are filled mainly by university graduates, and then make gradual shifts in instructional resources to accommodate the long run trend".²³

The industrial/functional approach to the future of higher education resulting from the application of the paradigm of relevance is no less evident in the second of those studies by David Stager concerning accessibility and the demand for university education. In it Stager addresses the "issue of accessibility to university level education in the context of economic realities and in the context of a differentiated university structure".²⁴

Economics is the basis of the analysis; terms such as consumption which recognizes that education may provide direct, immediate satisfaction or enjoyment for a student,

22- Ibid.; page 11.

23- Ibid.; page 41.

24- David Stager, Accessibility and the Demand for University Education (Toronto: Government of Ontario, June 1984), page 1.

although "these are minor parts of the benefits".²⁵ According to Stager, there are many surveys which have found that students' major motives for attending university are to obtain better employment in terms of job choice, satisfaction and financial returns. The latter represents investment or human capital approach to the demand for higher education:

It is important to focus on the rate-of-return approach because it encompasses changes in both educational costs and changing labour market conditions... In fact, evidence shows that changes in the rate-of-return generally account for more of the variation in enrolment over time than do fees or family income.²⁶

The influence of the paradigm of relevance on the conceptual approaches in the study of higher education is also evident in the third research by Richard M. Bird and Meyer W. Bucovetsky.

The researchers seek forms of governmental action that would encourage greater personal or foundation support for the universities; what further changes in public funding arrangements would encourage industry-university linkage and industry support of post-secondary education? The researchers conclude that the main burden for the development of industry-university links lies with the universities themselves because even if private support doubled it would have little real significance on university finances; but they also add "even if, as is likely to be the case, private

25- Ibid.; page 6.

26- Ibid.; page 8.

funding flows more readily to some parts of the academic community than others, gift horses should not be turned away simply because some must walk while others must ride".²⁷

They add that cultural differences between business and the academics should not hinder private support. Universities should be ready to hire the marketing, managerial, legal, and accounting talents needed. As for government, its university policies on linkages with corporate Canada "must be well coordinated internally".²⁸

The influence of the paradigm of relevance in the conclusions found in all three of these studies is overwhelming. Their analysis is based mostly on the vision of higher education as a function of the economy at large. Their argumentation and conclusions are formulated in terms found in general in economics manuals: costs and revenues, rate-of-return, efficiency, the market, etc.... These economic terms constitute the basis of their understanding of the role of government in post-secondary education.

The significance of looking at these studies is two-fold. First, it has to do with the ideas that emerge from their analysis. The industrial/functional approach to the future of higher education has to do with linking education

27- Bird and Bucovetsky, Private Support for Universities (Toronto: Government of Ontario, October 1984), page 71.

28- Ibid.; page 66.

with the economy. And second, it has to do with the vocabulary, the choice of words and concepts of analysis. Little attention is paid to the more cultural and philosophical aspects of higher education.

4) Recent Major Government Initiatives in PSE

In retrospect, the 1980s have been particularly fertile years for the post-secondary education in Ontario, both in thought and in action. Although the province has experienced a change of government in 1986, the approach taken by the Liberals in post-secondary education policy-making is but a continuation from that new approach being developed in 1984 by Conservatives under William Davis. One notable difference though is the state of the finances and the availability of resources. This is in part due to the increasing awareness of the need to address the higher education issue and also due to the relative economic prosperity of the province which has permitted the government of Ontario greater room to manoeuvre for the Government of Ontario. Analysis of the remedial actions taken by the Government of Ontario since the election of the Liberal Party in 1986, shows the basis for most government initiatives.

For instance on October 15, 1986, it was announced that a \$25 million University Research Incentive Fund (URIF) was to be available for a three year period. The funding is based on a matching-dollar formula to encourage private sector involvement... "the government will match each dollar

invested by industry or business in an approved research program at an Ontario university".²⁹

For the government, the stated anticipated objectives and benefits are increased cooperation in research; economic development for the province; fostering new links between the academic and the industrial research communities; and more frequent transfer of technology from the universities to the private sector; increased industrial support of and access to "leading edge" research; greater expertise and research capacities in the universities; and, encouragement of interdisciplinary research. "University-based research is one of the keys in maintaining Ontario's leading role in the development of new technologies to ensure economic growth".³⁰

On August 22, 1986, the minister announced the Ontario-China exchange program. It was designed to encourage the two-way exchange of students, researchers and faculty from Ontario colleges and universities with educational institutions in the Jiangsu Province.³¹ As Bernie Frolic, member of the Joint Centre on Modern East Asia, stated "this exchange has the potential to be better than other programs because we are conscious of the intent to blend the goals of academia with improved trade relations... the

29- Ministry of Colleges and Universities, Perspectives, January 1987.

30- MCU, Press Release, October 15, 1986.

31- MCU, Estimates Statement, 1986-87.

exchange...focuses on modern China as the country moves into international trade and finance".³²

In November 1986, Greg Sorbara, the Minister of Colleges and Universities, led a delegation to the Middle-East. This delegation was composed of educators and senior officials. In 19 days, the mission visited five Middle-East countries to seek memorandums of understanding in the fields of education and training. "This mission, given its twin educational and commercial thrusts, has the potential of seeding long-term economic returns for the province in a region where we are making our presence and expertise known".³³

The mission was considered as an important catalyst in creating an environment to increase Ontario's trade potential. The linking of education and trade are essential components of the industrial/functional approach to higher education.

As we have established earlier, the industrial/functional approach put much emphasis on reforming the financing structure of the system of post-secondary education. Under the leadership of David Peterson and Greg Sorbara, the Liberal Party has undertaken such reforms. Although the increased funding observed can only be welcomed,

32- MCU, Education Ontario (Toronto: October 1986).

33- The countries were Kuwait, Oman, North Yemen, Saudi Arabia and the United Arab Emirates. MCU, Perspective (January 1987).

it is the manner in which the new funding is to be distributed which concerns us. The 1986-87 Estimates Statement contains much of the vocabulary that serves as political justification for the approach the government has adopted.

First, let us look at the new funding arrangements set-up by the ministry (as suggested by the Ontario Council on University Affairs). While grants for operating purposes at community colleges were increased to \$624 million, it is at the university that the proposed changes in the allocation of new funds take effect. Operating grants to Ontario's universities and related institutions were increased by 11.5% for the 1987-88 fiscal year. This increase of \$148.7 million, means that a total of \$1,442 million will be spent in that fiscal year. According to the minister "now we're well on our way to creating a financial environment which will allow our institutions to contribute in a very significant way to the province's economic and social growth".

At the same time, the ministry established a new funding formula. Previously, the operating grants formula had been exclusively related to enrolment. It was seen, as some put it, as "promoting unproductive competition amongst institutions"... "In accepting the Council's advice, we are, therefore, putting into place an integrated package of

funding envelopes for designated purposes to achieve these objectives".³⁴

And so it goes that the first \$50 million would serve to recognize enrolment growth and to promote accessibility.³⁵ It is also slated to serve to encourage increased research activity. Then, under the new formula, four new envelopes were created. The first is the accessibility envelope which recognizes enrolment growth beyond current 1986-87 levels. The second is the establishment of the Research Overhead/Infrastructure Funding envelope; it seeks to promote more research. The third is the Programs Adjustment envelopes which, in principle, should assist in meeting the costs associated "with program start-up in areas of critical need, moving capacity from one institution to another or initiating cooperative efforts and joint programs". Finally, the fourth envelope is the Mission-Related Institutions-Specific Funding envelope, which should serve to promote further differentiation; the Northern Mission; bilingualism, as well as "weight changes for Ryerson and the Ontario College of Art in 1987-88".³⁶

In essence, the new and more sophisticated formula is an attempt by the government to gain greater control over the

34- MCU, Press Release, March 10, 1987.

35- It is interesting to note that the accessibility issue has changed because there is just a bit more money and it is a politically popular issue.

36- MCU, Press Release, March 10, 1987.

direction and orientation of funds. It specifies funding according to publicly stated objectives determined at the level of planning and priorities; post-secondary institutions have seen their capacity to direct themselves reduced consistently under this new approach to funding and to post-secondary education as a whole. It is a process of rationalization of resources while creating so-called incentives for adjustments. In effect, it is the slow but sure establishment of the proposals found in the Fisher and Bovey reports. It is also the slow but sure application of the paradigm of relevance and the industrial/functional approach to higher education.

Finally, if there is still any doubt about the strength of the industrial/functional approach and its impact on those formulating public policy aimed at the development of post-secondary education, the following passages should be noted. The following excerpt is taken from the speech given by the Honorable Gregory Sorbara as Minister of Collèges and Universities to the Standing committee on Social Development while presenting the Estimates Statement:

I was interested in looking at how the system is meeting changing social and economic demands, and assisting society in adjusting to technological change... Paramount among these demands are the new standards of a world economy... we face intense international competition based upon research, knowledge, information and new technologies... The fact is, that economic advancement now springs primarily from the fruits of scientific research. The old economic order

held natural resources supreme. But in the new order, human resources and our ability to use those resources in the transformation of technological innovation into industrial growth, are supreme. There is no reason why we cannot maintain in Ontario the Canadian tradition of being at the leading edge of scientific and technological innovation. In short, if Ontario is to be a world-class competitor it must also have a world-class post-secondary system that inspires and energizes all our efforts at the world level. 37

There is one last, but not least, governmental effort more than worth noting; that is, the creation of the Premier's Council in July, 1986. The concept had first been introduced in the Speech from the Throne in April 1986. Its mandate is to "steer Ontario into the forefront of economic leadership and technological innovation... to assist the government in developing long-term economic development strategies, with an emphasis on technological advancement and international competitiveness and to provide strategic advice about future economic and industrial opportunities for Ontario."38

Within the framework of this initiative, a \$1 billion Technology Fund was created to "support, complement and encourage science and technology research in the private sector and post-secondary institutions".39 The Premier's Council, in charge of administrating the fund, is chaired by

37- MCU, Estimates Statement, 1986-87.

38- Premier's Council, Background Report (June 19, 1987).

39- Ibid.

the Premier and has twenty-eight members; among them prominent representatives of the business, labour and academic communities and members of government.

Their first major assignment was the creation of Centres of Excellence. They are joint ventures which bring together the expertise of both the academic and business communities in each Centre... "These Centres are intended to stimulate the production of advanced research, to train and develop world class researchers over the long term, and to encourage the transfer and diffusion of technology".⁴⁰ The idea was the work of one of the council's subcommittees.

Another subcommittee "is currently working on proposals to stimulate entrepreneurship in Ontario". The work of this group has already resulted in a "Call for Proposals for Centres of Entrepreneurship in Ontario colleges and universities".⁴¹

The motives for a recently commissioned wide-ranging research study are worth noting

It, the research, is focusing on the international competitive position of fifteen key Ontario industry sectors. As well, it is investigating the capabilities of our educational, science and technology infrastructure and conducting a sweeping review of government policies and programs both here and abroad. There is no doubt that this effort will stimulate new perspectives on priorities and directions for government.⁴²

40- Ibid.

41- Ibid.

42- Ibid.

CHAPTER 2: THE NATIONAL APPLICATION OF THE
INDUSTRIAL/FUNCTIONAL APPROACH

In studying the dominant paradigm and conceptual approach to the future of post-secondary education in Ontario, it is also important to analyze the increasing willingness of many groups and personalities to establish a national policy and/or national institutional structure. Now, it is generally accepted that the federal government plays an increasingly important role in post-secondary education, notwithstanding the fact that education is under provincial constitutional jurisdiction.

The functional capacity of universities and colleges to combine human capital and technological research points to commercial applications, that are considered necessary in an advanced capitalist society such as Canada. Thus a national strategy is essential if our country is to remain competitive, and thus prosper.

The national perspective, as advocated by such groups as the Department of the Secretary of State, the Canadian Federation of Students, the Association of Universities and Colleges of Canada, the Liberal Party of Canada, the Corporate-Higher Education Forum, and by some noteworthy speakers during the National Forum on Post-secondary Education in Saskatoon (1987), and by many others, is in fact an expansion of the paradigm of relevance and the

industrial/functional approach as we have it in Ontario. It is mostly concerned with efficiency and economy, and it is best characterized by its relentless pursuit of industrial values such as those expressed in Alvin Toffler's The Third Wave. These are standardization, specialization, synchronization, maximization, and concentration.

Most solutions as such are, as we have seen at the Ontario level, concerned primarily with the financing system's allocation process, the rationalization of the structures, increasing integration between programs and the private sector, and are concerned with the commercial application of scientific research. As a result, education at the post-secondary level continues to be viewed as a function of the economy by most interveners even at the national level. The consequences of this, politically, are that, although concern with post-secondary education has increased, the ensuing debate fails to question the validity of the paradigm of relevance and of the industrial/functional approach.

In this chapter, we will demonstrate this by first outlining the national objectives for post-secondary education as stated by the Federal government. Then, we will show that the Federal government understands reform as a process of reallocating funds, namely federal fiscal transfers. Thirdly, we will expose the views of those groups who favour a process of nationalization for post-secondary

education, and how it falls within the confines of the industrial/functional approach. Finally, the industrial/functional approach will be made evident by the increasing movement toward integration of university research and curricula with the needs of the private sector, all for the sake of competitiveness, efficiency, and prosperity.

The views that we have gathered have been taken from government documents, as well as from publications and speeches from those groups and events, governmental or non-governmental, that we believe constitute the mainstream of Canadian society. These views are generally accepted as valid and reputable. They represent the views of many Canadians, and have considerable impact on the orientation that the government of Ontario and its people adopt. As well, they fall well within the confines of the ideological reality of the western world, that is under liberalism in the modern form which restricts debate to what is perceived as legitimate and functionally operational.

The importance of this chapter lies in the empirical sampling and demonstration of the mainstream paradigm and conceptual approach to the future of post-secondary education in Ontario and Canada. It should be considered as an essential complement of the first chapter which dealt exclusively with Ontario.

1) National Objectives for PSE as stated by the Federal
Government

Canada's objectives in supporting post-secondary education are outlined in a document entitled Federal and Provincial Support to Post-Secondary Education in Canada; it was produced by the Department of the Secretary of State for the year 1985-86 under the ministerial leadership of David Crombie. As stated by the latter in that document, the objectives correspond closely to those outlined by the Council of Ministers of Education in its published report Principles for Interaction: Federal-Provincial Relations and Post-Secondary Education in Canada.

In it, the government reiterated its support for an accessible system which "reflects the national government's role in promoting equality of opportunity for all citizens".⁴³ It also spoke of post-secondary education's impact on the social and cultural development of the country: "Indeed, it would be difficult to overestimate their significance 'colleges and universities' in shaping our society, in maintaining our identity and in enabling Canadians to exercise fully their rights and responsibilities as citizens."⁴⁴

43- Department of the Secretary of State, Federal and Provincial Support to Post-Secondary Education in Canada 1985-86. page 113.

44- Ibid.; page 114.

However noble these statements, very little real importance is attributed to these objectives except as a fancy for politicians in search of political capital. Most important is the statement of objectives made concerning the economic impact of PSE.

The role of post-secondary education as one of the keys to economic development has never been more evident than now. As the world economy becomes ever more knowledge-based, Canada must harness its natural and human resources in order to increase its ability to compete internationally and improve the quality of life for its citizens.⁴⁵

As a result, according to the government, its support for PSE in financial terms serves two purposes; first "is the provision of the highly qualified personnel needed for the operation of an advance economy", and second "is the support for the research that is vital to ensure our competitiveness around the world".⁴⁶

This is what the government considers as most fundamental in its support for post-secondary education. The industrial/functional paradigm is made evident in the language alone. Economy and competitiveness are again recurring themes in the dialogue of the Federal government. Furthermore, when referring to the personal and intangible benefits of PSE, it speaks of the development of human resources as "human capital":

45- Ibid.

46- Ibid.

The development of Canada's human capital is essential for our economic, social, and cultural survival. The future of our country lies no longer in the simple exploitation of our natural resources but rather in the brainpower of our citizens.⁴⁷

The industrial approach to PSE is not observed only through the obvious concern that the Federal government has for the economy and the competitiveness of Canada. But also through the increased willingness to improve Federal-Provincial functional interaction.

In September 1985, during a meeting of the Council of Ministers of Education of Canada, it was proposed that a set of principles governing interaction between federal and provincial governments in the area of PSE be established. At that time, it was recognized that the two orders of government have a significant role in working harmoniously and congruently, in undertaking concrete and meaningful consultation and cooperation, all the while in "keeping with their respective constitutional responsibilities to ensure the provision of adequate resources to post-secondary education and manpower training."⁴⁸

It was then that plans were discussed for the development of a national forum on PSE, of which we will speak later on in this chapter.

47- Ibid.; page 115.

48- Ibid.; page 118.

2) Proposals for Reform through EPF/PSE Fiscal Transfers

As part of our discussion on federal objectives in PSE and its increasing willingness to enhance functional integration of the system, a much awaited report was released in February 1985 which is of great interest. Indeed the Johnson Report, again published by the Department of the Secretary of State, is concerned with the specifics of the financial arrangements between the central government and its provincial counterparts, namely the Established Programs Financing/ Post-Secondary Education Fiscal Transfers. The report is entitled Giving Greater Point and Purpose to the Federal Financing of Post-Secondary Education and Research in Canada.

Johnson identified the problem as one of underfunding stemming from the nature of the financing arrangements. First, like many groups had already clamoured (ie. the Canadian Federation of Students), there are apparently no incentives for the provinces to increase their grants at the rate of GNP growth, for example. As well, he considered this to be part of a malaise in federal-provincial relations; that there were two different views for the use of EPF/PSE fiscal transfers. In essence "The fiscal transfers are unconditional block transfers, devoid of any incentives concerning their

use for post-secondary education, and, devoid, therefore, of any apparent national purpose."49

According to Mr. Johnson, there also was a "malaise" concerning the related priority accorded to research funding "grants from the granting councils do not cover indirect cost or all direct costs therefore, universities must charge those to the grant--thus reducing the actual amount which is available for research"50. It was also noted that there was a lack of incentive to develop world-class centres of excellence, as well as few incentives for self-induced reforms within the PSE system.

Mr. Johnson thus recommended that the rate of growth of EPF/PSE fiscal transfers, and provincial grants be harmonized "through growth in GNP and population or choice by the province up to the GNP"51 He also recommended that there be some redirection of funds from core financing to sponsored research, to make it a higher priority.

If one accepts as a premise, as Parliament has done, the proposition that expenditures on higher education should, at the least, grow with the GNP--and one might well argue that, because higher education is one of the major engines of growth, its financing should grow at a larger rate than that-- then one is forced to the conclusion that the financing of universities and colleges has in recent years been inadequate.52

49- Secretary of State, Giving Greater Point and Purpose to the Federal Financing of Post-secondary Education and Research in Canada, 1985.

50- Ibid.

51- Ibid.

52- Ibid.; page 17. 54

Therefore, as we have seen in this section, the industrial/functional approach is not necessarily one which does not recognize the existence of problems; in fact, it is well aware of a crisis in post-secondary education. However, this perspective assumes that it is a question of dealing with how the universities and colleges have problems functioning within the established social, political, and economic system (ie. of being relevant).

3) The Search for a National Perspective on PSE

WHEREAS federal support of post-secondary institutions exists largely through financial transfers to provincial governments; AND WHEREAS the Parliament of Canada is interested in participating with the provinces in the development and consideration of policies of national significance in the field of post-secondary education and in encouraging research on interprovincial, national and international educational issues;

The purpose of this Bill is to establish a Canadian Post-Secondary Education Council whose main function would be to provide a forum for the discussion of the development of post-secondary education in Canada and of interprovincial, national and international educational questions.

This is the essence of Bill C-228; a bill presented in October 1986 by William Rompkey, Member of Parliament for Grand Falls-White Bay-Labrador. The Liberal Party of Canada is a great promoter of the national approach on post-secondary education. As an opposition party, they have taken a stand on several occasions in Parliament, during their national conventions, while consulting with the public on post-secondary education, and in written form in such noteworthy publications as the Canadian Journal of Higher Education.

In this section, we shall highlight the conceptual approaches that dominate the thinking of those groups and people who promote a national perspective on post-secondary education. We shall deal, more specifically, with the Liberal Party of Canada, the Association of Universities and Colleges of Canada, the Canadian Federation of Students, and

finally, with the views expressed during the National Forum on Post-secondary Education in Saskatoon.

In an editorial published in the Canadian Journal of Higher Education, the aforementioned William Rompkey M.P. explained his vision of post-secondary education. The text is entitled "Canada's need for a national strategy for Post-secondary education".

The health of the Canadian society, and especially that of the Canadian economy, is tied in no small way to the health of post-secondary education... In an age when one of the few constants is change, those companies, those sectors, those nations which grow and prosper are the ones who emphasize research and development and who have prospective employees educated and prepared to meet rapid change in the market place.⁵³

According to Mr. Rompkey, the national government has more than a legitimate federal interest in higher education. It must ensure "adequate supplies of highly qualified people"⁵⁴. Along with a measure of equality of opportunity, there must also be "a development of the knowledge base that is required for economic growth and for national sovereignty".⁵⁵

I believe that national education strategy should be a top priority in Canada today...This is the greatest challenge facing Canada today and to fail

53- William Rompkey, "Canada's need for a national strategy for post-secondary education" in the Canadian Journal of Higher Education (Ottawa, Vol. XVI, No. 3, 1986.), page 1.

54- Ibid.

55- Ibid.; page 3.

to deal with it will be to put the nation at risk.⁵⁶

This feeling of a "national risk" if Canada fails to recognize this is also reflected in the Interim Report of the Liberal Party's National Working Group on Post-Secondary Education, chaired by another M.P., Roland de Corneille.

According to this group's findings the problem lies in the lack of national cooperation between the two levels of government, students and faculty. The national perspective for cooperation and integration is the industrial/functional approach; the Liberal Party's evaluation of the crisis is not any different; or at least does not offer any new alternative interpretation, its solution lies within those industrial values established in our introduction to this chapter:

...il est devenu impératif de développer une politique axée sur la coordination et la coopération en matière d'enseignement postsecondaire, tant particulièrement dans le cas d'une nation qui est de plus en plus impliquée dans le virage technologique.⁵⁷

In light of this report, many resolutions to this effect were brought forward at the 1986 National Convention of the Liberal Party of Canada, such as resolution 170 which reiterated the need for better management of the system.⁵⁸

56- Ibid.; page 6.

57- Roland de Corneille, Rapport Intérimaire du Groupe de Travail national du Parti Libéral sur l'Enseignement Postsecondaire. 1987.

58- WHEREAS there is now a shifting from natural resources as producers of national wealth to information resources as producers of national wealth; WHEREAS as a

Clearly there should be little doubt as to the similarity between the Liberal Party's supporters' interpretation of the crisis of education and that which we have observed in the rest of the literature examined so far.

The rationale falls well within what we have established as the paradigm of relevance and the industrial/functional approach. It is in fact a perspective that the Government of Canada, under the leadership of the Progressive Conservatives, accepts quite readily. The difference between the two parties lies in the method rather than in the vision.

Therefore, the importance of noting the conceptual approach of the Liberal Party of Canada lies in the fact that it is representative of the views of the mainstream Canadian society. This is further substantiated by the views of major concerned national interest groups expressed in preparation for and during the National Forum on Post-secondary education held in Saskatoon in October 1987.

One of those groups is the Association of Universities and Colleges of Canada. This association was incorporated in 1965 to foster and promote the interests of higher education in Canada. It seeks to represent Universities and colleges

result education can no longer be a social benefit from the state but rather a national capital resource; BE IT RESOLVED that there be a commitment to the creation of a national forum on education to establish national goals and objectives for education as a resource of the nation to oversee the development of policy and mechanisms to implement these goals and objectives.

with university level diplomas across Canada. In 1986, it represented 82 of these institutions. It effectively participates in many initiatives and events throughout the country in the name of, and for the sake of post-secondary education.

One of those events was the National Forum. It presented, in advance of the Forum, a sample of its position and vision during a press conference in Ottawa:

Given the provincial responsibility for education and the role of the federal government in equalizing opportunity across Canada, it is essential from the point of view of the universities and the country that the activities of the two levels of government be coordinated and in balance so that the achievement of national priorities can be realized in the assessment, planning and development of the post-secondary education sector in Canada.⁵⁹

Coordination between the two levels of government; production of highly qualified graduates to staff the different sectors of an advanced society like business, labour, and government; the advancement of knowledge through research have "immense significance for the economic, social, political and cultural welfare of the country".⁶⁰

As far as the AUCC is concerned " with the holding of the national forum on PSE an important step has been taken towards the creation of national policy on post-secondary education."⁶¹

59- AUCC, "An Open Message to the participants in the National Forum on Post-Secondary Education", (Ottawa; October 1987).

60- Ibid.

61- Ibid.

Another concerned group is the Canadian Federation of Students; it too has a national perspective on Post-secondary education. As well, it too, seems confined to the paradigm of relevance and adopts an industrial/functional approach to the future of higher education, for it is mainly concerned with the underfunding crisis and the management of the system; its demands, however, appear to be more extreme. It also seeks greater coordination and integration between the two levels of government when dealing with this issue:

...It proposes the establishment of a national organization which would facilitate and coordinate inter-provincial and federal/provincial priorities with respect to post-secondary education.⁶²

To many of those, in our country, who are in a position of power, be it politically or economically, the process of rationalization, that is integration of post-secondary education with the economy, is one of necessity. It's just a matter of time before this idea becomes generally accepted by all.

Since education is an acknowledged area of provincial responsibility, the heavy financial involvement in PSE may appear anomalous. It was not so viewed, however, by most interveners who appeared before this commission, for the great majority of those who spoke on this subject believed that there was a national role to be played in post-secondary education, and that in

62- CFS, "Brief to the National Forum on Post-secondary Education" (Ottawa: October 1987).

consequence, the federal government should be involved.⁶³

Without any doubts the crisis in higher education has been recognized. But ironically, the debate on the causes and the solutions are limited in scope by the domination of the paradigm of relevance and the industrial/functional approach.

The National Forum

The Forum was a national consultation organized "to help ensure that Canada's post-secondary education systems evolve to meet our growing requirements in a changing world". The initiative was officially taken during a joint announcement on March 30, 1987 by David Crombie, Secretary of State, and Anthony Brummet, Chairman of the Council of Ministers of Education, Canada. It had been promised in the September 1986 Speech from the Throne of the Government of Canada. As with the Fisher and Bovey reports, the structure of the dialogue is influenced by the institutionalization of the paradigm of relevance.

The forum sought opinions from a "wide cross section of society--the post-secondary education sector, employers of graduates, employee organizations, users of research, governments, special interest groups, and others:

63- Minister of Supply and Services Canada, Report of the Royal Commission on the Economic Union and Development Prospects for Canada (Ottawa: 1985), page 741.

It is hoped that the Forum will be able to draw upon past experience and on the knowledge of participants to identify and explore alternative directions which could enable Canadian post-secondary institutions to meet the challenges of the early 21st Century.⁶⁴

For the purpose of our analysis, this Forum provided the opportunity to confirm the affirmations that have been made so far in this paper; that indeed the paradigm of relevance and the industrial/functional approach, as it has been described throughout this analysis, is the most popular conceptual approach to the crisis and the future of higher education in Canada, and by that token, in Ontario as well.

It would be preposterous to affirm that all of the participants hold the same view; there are many perspectives, preoccupations, and interests that help make each interpretation, thus each presentation, different. However, it is obvious that the most common themes were funding and management. The agenda of the Forum alone well illustrates this point. (see appendix 3) But, for the purpose of our analysis, we will just note the essence of the speeches by two of the keynote speakers at the Forum.

In a speech entitled "In the Context of Change", Maurice Strong, introduced as diplomat and environmentalist, identified quite clearly what seemed to be the essential

⁶⁴- National Forum Secretariat, National Forum on Post-Secondary Education (Saskatoon, October 25-28, 1987), page 2.

message of the Forum. While reaffirming the role of science and technology in our economic life in the past, he states:

It is possible to combine a dynamic, competitive economy with maintenance of our identity as a nation...

The common denominator in establishing and maintaining Canada's competitive position in all of these areas will be its capacity to develop and apply the knowledge and skills of Canadians. If the principal source of added value and new wealth creation today is the application of human intelligence and knowledge, Canada's education system is the prime source of this capacity.

Another keynote speaker was Claude Castonguay, a successful Quebec businessman:

Il est impossible de dissocier l'éducation, l'économie et la réalité sociale. Les Canadiens et Canadiennes reconnaissent ce fait; plus encore, tous estiment que la richesse sociale, économique et culturelle de leur pays se fonde, en définitive, sur le degré d'éducation ou de formation de ses ressortissants-es.

Education and research are essential for prosperity, if Canada wishes to remain competitive, foster the utilization of resources and have international impact.

So far in this chapter, we have identified what constitutes the basis of a rising popular political will amongst some of the most important groups and people in Canadian society. But, as in the previous chapter, this discussion would be less interesting if this had not had consequences on the actions taken by the federal government. In the next section, we will demonstrate that the government of Canada, like that of Ontario, has not remained idle in applying directly the principles that emanate from such a dialogue.

4) Integration of Higher Education and the Private Sector

Indeed the Government of Canada has lent more than a sympathetic ear to the recent clamour on all sides of the Canadian polity. As a result, it has taken concrete steps to ensure that some of the demands are being met. Although, many are dissatisfied with those steps, the fact remains, as we have said already, that education, especially at the post-secondary level, is becoming a most popular issue; one which the Progressive Conservatives are not about to let slip by them especially in 1988, possibly an election year.

At this point, it is specially interesting to note those efforts, and to situate them within the spectrum of criticisms and demands that have been made up to just recently. Without impinging on the constitutional rights of the provinces, the Federal government has nevertheless found safe haven for its interest in post-secondary education in the form of funding.

It should be said that there is nothing new to this form of federal intervention, however, we will see that what is new is the way it intends to disburse the funds, and the political rhetoric accompanying that funding.

The political priorities of the day have made it such that not only does the government of Ontario have increasing interest in where the money goes, but the Government of Canada as well. This process of centralization has

everything to do with the industrial/functional approach. And this is not only the result of budgetary restraints and fiscal realities, but also of a conceptual approach to what purpose education should serve.

Research and Development

R & D has become another political and ideological password of our leaders, like the use of the word "change", in search of political capital. R & D is that password which makes the industrial/functional approach acceptable to Canadian society. Canada is constantly being compared to other industrialized countries for its research and development efforts. And unless that effort is increased, there is little doubt, in many of a political and corporate leaders' minds, that the country will be left behind in the great technological race.

R & D is the process by which technological innovations obtained through scientific research are turned into commercially successful applications. The logic is that the more scientific research we have, the more technological innovations we have, and the more commercially successful applications we have. The result is better goods and services, at better prices, thus greater competitiveness, and greater volume of exports. The bottom line is more profit, and for the country higher GNP growth, which, in turns,

means greater per capita revenue for each citizen. In other words progress is prosperity.

At least this is the generally accepted dogma. The problem being then "Where does most R & D take place?". The Corporate-Higher Education Forum, a group of corporate leaders and university presidents from across the country, provides the answer:

Canada's economy also benefits substantially in that university R & D is a key source of the technological advances that protect our existing industries--while creating new jobs in the new industries such technological advances spawn... All these benefits lead us to believe that cooperative R & D offers a significant opportunity to improve Canada's sub-standard performance in the world-wide R & D stakes.⁶⁵

"Cooperative R & D" has become the term in vogue in the high political and corporate circles. And it is the Corporate-Higher Education Forum's view of R & D which seems to have caught the federal government's attention:

Corporations recognize that better educational programs mean better graduates, leading in turn to greater competitiveness, both within Canada and globally. They also recognize that universities are an excellent source of technological expertise, which they either cannot afford to develop in-house, or cannot justify as a permanent department.⁶⁶

65- The Corporate-Higher Education Forum has produced two studies which are of particular interest to us. One is entitled Making the Match and Corporate Employers, and another, from which this quotation is taken out of, Corporate-University Cooperation in Research and Development, 1985.

66- Corporate-Higher Education Forum Task Force on Corporate University Cooperation in Research and Development, Spending Smarter, 1985.

In another study, the Corporate-Higher Education Forum examined "the perceptions of managers and university-educated employees of large Canadian corporations with respect to the adequacy of university education for employment".⁶⁷ It concluded that university education and corporate training should be thought of as a single process cooperatively managed.

Thus, according to these most influential people, university should indeed become increasingly integrated with the private sector in order to facilitate both training and R & D. The status of this group combined with the fact that its findings are being supported by the universities presidents themselves ensures them the respectability and credibility required. This is the reason why more than just a coincidental relationship between the activities of this group and the recent initiatives of the federal government can be assumed.

However, the recent actions of the government, such as we will enumerate further on, cannot be solely explained by this. For example, the idea of creating centres of excellence of national significance, like those that are taking shape in Ontario, could be found in the Johnson Report to which we have alluded to earlier in this chapter. Johnson has concluded that:

67- Corporate-Higher Education Forum, Making the Match and Corporate Employers, 1986.

the system, as such, is not really geared to support or to develop the kind of transcending excellence that one thinks of when one speaks of world-class centres: centres which set Canada apart, and which give it a lead; centres which are the "one of a kind" endeavour that would be seen, by the public and private university sectors alike, as being important to Canada's economic and technological and social development; centres which are of such breadth and such depth as to evoke the kind of institutional and budgetary "special status" which they need.⁶⁸

In this report, Johnson noted another problem with undertaking this process of creating centres of excellence: "How to do this without putting government in the position of directing universities in their educational and research program--a role which would be antithetical to the Canadian tradition of academic interdependence is the dilemma?"⁶⁹

How times have changed! Today, there seems to be little concern for "academic independence". If it's good for the country, it's good for universities. That appears to be the new motto. Post-secondary education is becoming a political priority, in the eyes of the federal government, because it is being promoted as a panacea for resolving Canada's failures in the field of R & D. And this is a very new political reality.

⁶⁸- Department of the Secretary of State, Giving Greater Point and Purpose to the Federal Financing of Post-secondary Education and Research in Canada. (Ottawa: 1985), page 20.

⁶⁹- Ibid.; page 21.

On October 20, the Toronto Star published an article by Janice Dineen entitled "Seeking new paths to lead Canadians to high-tech peaks: Ottawa looks at ways to help top scientists in schools and industry team up for research". The story explains how the Prime Minister, Brian Mulroney, has requested a group of bureaucrats to look for ways to team up top scientists "to lead Canada out of its research wilderness into a bright economic future.":

If Canada's lasers, microchips and still-undreamed-of gadgets can be better than everyone else's-- and if Canadian scientists can make such discoveries at Canadian universities-- the economy could be given a healthy jolt of adrenalin...70

Again, the rationale being, that if academics and industry scientists cooperate they could develop areas of particular expertise which would then enhance Canada's competitive position in those fields. To do this Brian Mulroney also requested plans for Centres of Excellence. These would facilitate the process by which scientific results and technological innovations resulting from them would be quickly forwarded to commercial uses. Quoting Geraldine Kenney-Wallace, chairman of the Science Council of Canada, the article noted that:

the demand now is to be competitive with the resources of the future, which are knowledge and people. Science and technology are key ingredients of economic renewal and revitalization of our

70- Janice Dineen, "Seeking new paths to lead Canadians to high-tech peaks: Ottawa looks at ways to help top scientists in schools and industry team up for research" Toronto Star (Toronto: October 20, 1987)

industries...There must also be a strong industrial research and development base to take the commercially exploitable ideas and run with them.71

On January 14, 1988, those plans were to finally materialize. It was announced that \$1.3 billion would be spent on technology research for the purposes stated above. The funding will take the form of 2,500 scholarships of \$2,000 each and \$250 million will be spent to set-up centres of excellence --networks of researchers and scientists-- on university campuses. All this money will apparently be spent in the next five years.

It was not so long ago as well that the three granting councils for Medicine, Sciences, and Social Sciences and Humanities were subjected to a matching grant formula with the private sector; thereby, further integrating the private sector with universities.

These recent moves by the federal government demonstrate fully and clearly the direction it intends to take concerning post-secondary education. Those industrial values remain in firm place even though we are moving into a post-industrial era. The industrial/functional approach applies itself as much on the provincial level in Ontario as on the national level.

Many of those groups and people of which we have spoken already may still be criticizing the government for this narrow-minded approach. Others will cry out against the insufficient money the system will be receiving, because this

added political willingness and the increasing funds that go with it do not solve the overall problem of underfunding and management. Nevertheless it is obvious that, for those to whom we have referred in this chapter, the crisis of PSE is one of relevance; and the future of higher education is inextricably linked with the future of the economy.

CHAPTER 3: THE PARADOX AND THE FUTURE OF HIGHER EDUCATION

This critique of the dominant conceptual approach to the future of higher education has concerned itself with the issue at the political level. We have identified what seemed the most widely agreed upon interpretation of the crisis in PSE and conceptual approach as propagated in the political sphere by various concerned groups and people at both the Ontario and the national level. We have also looked at how the governments of both these levels of government have taken it upon themselves to deal with the issues and with what they consider the crisis. But our sampling of views remains incomplete. There is further proof that the paradigm of relevance and the industrial/functional approach is even more wide-ranging.

Again, there is little doubt in most minds as to the existence of a crisis in PSE. However, as far as this discussion is concerned, the question becomes complicated as the essence of this crisis. The fact of the matter is that most of the views presented in this paper are concerned with the impact of underfunding on the relevance of the system, and with ways of resolving that problem. In dealing with the crisis, the debate politically has had more to do with the management of the system and funding arrangements, than with the essence and meaning of higher education.

Nonetheless, as will be observed in the next chapters, there seems to exist some very important groups and people whose dialogue and approaches would suggest the existence of a real debate; one dealing with the essence of higher education. It is, perhaps, in this more authentic debate, that it is possible to develop a better understanding of the future of higher education; an understanding that transcends and goes beyond the paradigm of relevance and the industrial/functional approach.

We are concerned, here, with the statements of the Council of Ontario Universities, which represents the universities of Ontario; the Canadian Association of University Teachers, which represents a significant number of Ontario teachers and librarians; the National Consortium of Scientific and Educational Societies, representing rhetorically the views of the research community such as those of the three Canadian granting councils; and, in the end, those views, pertinently, of the people of Ontario.

Upon close scrutiny, it can be observed that fundamental questions about the authentic role and purpose of higher education are dealt with in a serious fashion by some elements within this community. One of the favorite theme of discussion has to do with what should be considered as the "core undertaking" of universities. Unfortunately, as we will demonstrate in this chapter, in their attempts at

defining what higher education is, they too fall prey to the industrial/functional paradigm.

The paradigm of relevance and the industrial/functional approach are a way of explaining things and their correlation and the possible solutions to a problem. In the public realm of political things, of which education is now inevitably a part, the dialogue of each of these groups listed above seems to have been transformed, twisted due to the powerful influence of the dominant paradigm. For example, unlike traditionally, the "core undertaking" is not necessarily antithetical with the short-term demands of society on universities. The polemics, between autonomy and intervention that subsisted until recently, is no more; it is now a question of balance. This appears to be the paradoxical nature of the emerging dialogue.

It is a question of balance between what some brand as the "traditional academy" approach versus the "utilitarian approach", others call it a balance between the "long-term" role versus the "short-term" role. In essence, it is a question of balance between "pedagogy" and the now more-than-ever-before famous "research and development" issue. But, is it really? As we have mentioned before, because post-secondary education has become increasingly dependent on public moneys, it has essentially entered the realm of the political and of the accountable. Accountable to

politicians, who in turn are responsible to the people, in theory.

This means that, given budget and fiscal restraint, each additional input of public funding must be justified, and to be justified, these must produce results. And, finally, these results must be seen to answer or to attest to the political priorities of the day. Today, the political priority, of course, is the economy.

Thus, in promoting balance, each of these groups must also address the issue of underfunding and management of the system, in doing so they have tended toward the industrial/functional approach as a form of justification. As a result, their contribution to the political debate, similarly with those elements that we have already analyzed, is centered on the crisis of underfunding and its effect on the capacity of the PSE sector to respond to economic demands and the future of the technological society.

The importance of this chapter lies in the fact that here we are dealing with the people who manage, teach, and do the research at the post-secondary level. Other than the students, they are the "within" element. No analysis of the conceptual approaches to the future of higher education would be relevant without a study of the views of those who make it.

It is precisely because they are the "within" part of this whole discussion, that we are able to detect some

semblance of a "truer" debate. But, unfortunately so as well, it is also because they are the "constituents" that they fall prey to some sort of self-interest depending on their field of study, expertise, and experiences in managing the crisis.

In the last portion of this chapter, we will introduce the public's opinion on the subject. It will be interesting to notice how the citizens of this province do have some sense of the "truer" debate. It is more in this perspective, rather than as "within" elements that their contribution to the political dialogue is made important and relevant to this chapter.

But first, we shall look at what the universities of Ontario are saying. How do they perceive the crisis and the issue of underfunding? How has the quality and the accessibility to university education been affected? How do they perceive their nature and role in society for now and for the future? What constitutes their philosophical understanding of the essence of higher education, and how does this interpretation translate into practical applications? In the second part, those same questions will be addressed to the teachers and researchers of Ontario and Canada, generally.

1) What Are The Universities Saying?

Although we have already analyzed the documentation of the Association of Colleges and Universities of Canada for its views on the future of higher education, it is also important to specifically focus on what the universities of Ontario are saying. This group of institutions is formally united under the guise of the Council of Ontario Universities. The COU has been an integral part of the policy planning process in Ontario since the beginning of the 1970s, and this mostly as an advisory body to both the Ontario Council on University Affairs and directly to the government of Ontario.

As was mentioned in the introduction to this chapter, this COU can be identified as one group which seems to attempt to broaden the debate over the future of higher education in Ontario. Their insistence on "core undertaking" of universities and on "institutional autonomy" is, as will be seen, illustrative of that fact.

However, it is also a fact that in making their grievances public, they continuously reenforce the industrial/functional approach with their insistence on the beneficial impact that universities have had and shall continue to have on the economic well-being of the province, as well their capacity to prepare the people of this province

for the rapid social changes brought about by the technological revolution.

Core Undertaking

Quoting from a text prepared as a discussion paper by an ad hoc committee of the Board of Directors of the Association Universities and Colleges of Canada, while presenting a brief entitled Federal-Provincial Relations and Support for the Universities in 1982, the Council of Ontario Universities reaffirmed what it considered to be the "core undertaking" of universities:

...the university is the corporate realization of man's will to know and to understand. It is ... committed in the long term to extending and communicating man's understanding of matter, energy, and materials on the cosmic scale of galaxies, on the human scale of nuclear reactors and oil refineries and on the molecular scale of chemistry, physics and biology; it is committed to extending and communicating man's understanding of the nature of life, the processes of development, disease and death in cells, in organs, in animals, plants and man in communities, peoples and nations; of the roots and forms of political ideologies and power, of why economies flourish and flounder; of the behaviour of man in families, cities, organizations; of man's sustaining imagination, as expressed in literature, drama, philosophy and religion, about the shape of society as it has been and might become...

...the university is concerned with questions at the frontier of human understanding and experience. It is committed to building a capital stock of knowledge from which industry draws in conceiving new technologies, from which nations draw in adaptive response to crises, and from which

individuals draw in comprehending their place and times.⁷²

In other words, university "has an immense range of intrinsic usefulness simply because it is fundamental". Thus, "the creation and transmission of knowledge and skills across a broad spectrum of disciplines and professions constitute what may be called the core undertaking of universities."⁷³

This is a rather nice definition of what universities are; although it does not necessarily address the issue of how universities should be run, and what level of autonomy they should have. Nonetheless, it is obvious that it leaves room for an honest debate on the question of the role of the universities and the right of the public authorities to appropriate themselves of the functions performed by them.

By its very nature, the core undertaking requires a measure of critical detachment from the immediate context, and should not be, as much as this is possible, be subject to the political whims of the day. But...

Yet the nature of the modern world is such that no university of high quality can sustain its vitality and resources in isolation from its local, regional, national or international milieu. The dramatic consequences of the achievements of universities, the high cost of sustaining these institutions and their increasing willingness to engage in practical enterprises have led to rising expectations that they should focus their attention

72- COU, Federal-Provincial Relations and Support for the Universities, 1982.

73- Ibid.

on the short-term needs of societies that sustain them.⁷⁴

In essence, for the Council of Ontario Universities, the authentic nature and role of universities is a juggling act between the necessity for a measure of "critical detachment" as characterized by the "long-term" or "traditional academy" approach and the need for greater integration of the "short-term" or "utilitarian" purposes of universities within society.

It is a responsibility of universities to respond to certain needs of governments, business, and industry through the execution of projects for which the motivating objectives is the short-term needs of the sponsors.⁷⁵

It would seem as though, given the above rhetorical interpretation of the nature and role of universities, that they choose to promote an approach that respects those fields of study and pedagogy that do not seem to bring immediate rewards and results for the economic needs of Ontario. Thus, in speaking on the issue of provincial and federal coordination in the financing system allocation process, they affirm that there is a "need for the coordinated provision of stable core funding according to publicly and therefore politically understood principles...There is a need for a shared conviction that such is indeed the case and to clarify

74- Ibid.

75- Ibid.; page 52.

the basis upon which public decisions concerning universities are made."⁷⁶

In bringing their concerns to the political arena, the universities favour the idea that governments have a "well-developed appreciation of the nature of universities, and act to maintain policies that support what is best in the universities. For their part, while remaining true to their nature as institutions of higher learning, the universities must cultivate a proper appreciation of the priorities of government and of the need to accept reasonable government requirement to show good stewardship in the use of public funds."⁷⁷

What this all means of course is that universities, as a result of the modern reality of Ontario universities and society, are in fact becoming subservient to government priorities not only in financial terms but also, to an inevitable degree, in nature and content as well. This is precisely the problem; we shall demonstrate proof of this further into the discussion. This being admitted, the university leaders have embarked on a crusade against the crisis in underfunding in a way not so dissimilar from all the other groups who have approached the governments of Ontario and Canada on that question. And so the possibility of an authentic debate on the future of higher education and

76- Ibid.; page 57.

77- Ibid.; page 2.

what it all should mean is relegated to the back-burner, like a good many others issues of sociological importance.

From this point on, it is safe to say that the university sector's representatives are no longer interested in the issue of balance between the pedagogical role of higher education and its more utilitarian purposes within the context of the need for "Research and Development"; but rather, they choose to seek more funds, even though much of it is earmarked, at the cost of abandoning some institutional autonomy for the core undertaking.

The industrial/functional approach satisfies in more than many ways the interests of those people who sit on the Board of Governors of most universities, many of whom are prominent business people and industry managers, for whom the intrinsic purposes of higher education have little or no meaning. This body is the ultimate decision making authority of the university, and it is mostly concerned with manageability, not with pedagogical planning. It is, of course, very dangerous to generalize in such a fashion. However, there are many examples of universities who have gone so far as to restructure their administration so as to enable them to plan more adequately in light of the new political priorities of the day and the new financing's allocation process.

Without looking at specific cases, much can be inferred by looking at the reaction of the Council of Ontario

Universities to some of the major government initiatives in Ontario since the beginning of the 1980s. A review of the literature produced by the COU should provide us with evidence about how the universities interpret their mandate.

In a response to the discussion paper of the Commission on the Future Development of the Universities in Ontario, the Bovey Commission, in a brief entitled Continuity and Renewal: The Demand for Excellence, the council addressed the main themes of quality, accessibility, system balance and differentiation, funding mechanisms, and planning and coordination. (See chapter 1 for more information on the Bovey Commission)

In this section, it will be seen that the COU responded fairly positively to the main recommendations of the Bovey Commission on most of these issues. In other words, it seems that the universities of Ontario have long ago accepted the paradigm of relevance and the industrial/functional approach as a way of understanding and resolving the crisis.

First, on the issue of differentiation, the Government in 1984 was seriously considering strengthening the universities of Ontario through the stimulation and concentration of excellence, the differentiation of institutional roles, and the elimination of duplication; the universities responded:

...for their part, we are ready to participate with the government in the development of a

coherent public policy on higher education. This will be the substance from which an intellectual strategy can be developed to underpin the provinces' economic strategy. 78

On the issue of adaptability, while recognizing the financial constraints, its impact on faculty complement and renewal, the existence of an imbalance between teachers and researchers, they proposed the creation of an adjustment fund "not to be used solely to adjust faculty complements, but also to enhance adaptability through modifications to physical plants to adapt to new discipline needs, new modes of instruction, and new relationships with business and industry."79

Concerning funding, they believe that core undertaking of universities should be funded by both levels of government via an institutional infrastructure. Thus they proposed the creation of a Canadian Advisory Council for Higher Education and Research to coordinate the roles of the federal and provincial governments in the funding of university teaching and research.

For the universities, the efficiency of the system is primordial: "Improvements in institutional planning and programming, in inter-institutional cooperation and coordination, in system structures and methods of funding allocation can be made in the interest of enhanced efficiency

78- COU, Briefing Notes No. 14 March, 1985.

79- Ibid.; page v.

and effectiveness, but none will improve quality if financial support remains at its current level."⁸⁰

On the issue of institutional autonomy:
It remains a prerequisite for strong and vigorous universities. This autonomy is not incompatible with accountability. Nor is it antithetical to the development of inter-institutional cooperation and coordination. Autonomy implies that initiative and management should rest with individual institutions in a generally decentralized system.⁸¹

Similarly to the groups and people whose conceptual approaches to the future of higher education have already been analyzed in the previous two chapters, the Council of Ontario Universities is mostly concerned with the possibility of bringing the financial resources provided to universities into accord with the educational mandate they have been given and thus render the system more relevant. The relevance of the system by its ability to fulfill the "educational mandate". The Council of Ontario Universities, in a brief to the Standing Committee on Social Development of the Legislature of Ontario in September 1983, stated that:

They [universities] acknowledge that economic renewal is a high priority at this time and are anxious to play their part in assisting with the renewal. Universities have always played a major role in stimulating economic growth and in responding to technological change; they can play an enhanced role in the future...

...By providing the financial resources identified in this brief as representing real needs, the government can seize the opportunity of enabling

80- Ibid.; page viii.

81- Ibid.; page 8.

the universities to provide a further contribution to the development of Ontario.⁸²

In another brief to the Treasurer of Ontario Larry Grossman as a contribution to the consultative process adopted by the treasurer in the preparation of the 1984-85 budget:

...universities are clearly generators of economic growth. American studies have shown education, historically, to be a highly significant factor in the improvement of productivity in the United States. Similar conclusions were reached by the Economic Council of Canada relative to the performance of the Canadian economy. ⁸³

82- COU, Briefing Notes No.3, November 1983.

83- COU, Briefing Notes No.6, March 1984.

2) What Are The Teachers and Researchers Saying?

Like their fellow university administrators and representatives, the teachers and the researchers are also interested in the future of higher education. They too contribute to the debate (or non-debate) with seemingly more profound explanations as to the nature and role of higher education. They can claim to represent an understanding of the intrinsic nature of the benefits gained through higher education both at the individual and the societal level.

But, they too seemed to have fallen in a conceptual trap, a paradox. In speaking of the nature and role of higher education, their contribution to the dialogue at the political level seems to focus especially on the impact of underfunding on the system's capacity. Thus, in attempting to legitimize the need for the additional funding and for special political attention, they use a vocabulary not so different at all from that which has been identified so far in this paper.

It becomes obvious that, for the teachers and the research community, public funding of post-secondary education and the establishment of it as a higher political priority, lead to a juggling act between the long-term and short-term demands on higher education institutions, between teaching and fundamental research versus applied research and development. That higher education is inextricably bound to

the structural and institutional framework of modern canadian society; that universities perform a function.

In this section, we will be looking at the literature produced by the Canadian Association of University Teachers which is a national professional association representing some 27,000 professors and professional librarians in universities in all parts of Canada, a great number of which from Ontario. Founded in 1951, the object of the Association is to promote their particular interests, to advance the standards of their professions, and "to seek to improve the quality of higher education in Canada".⁸⁴

As well, we will analyze the literature produced by the National Consortium of Scientific and Educational Societies, which is an hoc organization linking mostly researchers in the sciences and the social sciences. The documentation used for this study was produced by the National Consortium in preparation for the lobbying week on Parliament Hill in Ottawa.⁸⁵ Thus, all member organizations developed a consensus which united them in their drive to conscientize

84- CAUT, It is time to take a stand: University Education and Canada's Youth A brief presented to the Senate Committee on Youth, September 1985, page 1.

85- The lobbying session was held from the 25 to 29 of February 1988.

politicians about the problems of underfunding.⁸⁶ (see Appendix 4 for a list of members)

The views expressed by the three Canadian granting councils are reviewed here as an integral part to the consortium's views; they are generally accepted by the research community member organizations found in the consortium. However, by their very status as para-governmental institutions, they are not official members of the National Consortium of Scientific and Educational Societies.

a) Canadian Association of University Teachers

...the real debate has to take place about what kind of university is required now and will be required in the future. This debate must start now if Canada is to be ready in the 21st Century when the youth of today will be running our economy and society.⁸⁷

Indeed, teachers too are concerned about the future of post-secondary education in Ontario and Canada. And indeed, they too are expressing their view on what universities are, and what they mean for the rest of society. And, they too seem

86- The Canadian Federation of Students is also a member of the consortium. However, it does not in any way cause an analytical dilemma for the purpose of our discussion. The ideas expressed by the consortium are somewhat similar, though.

87- CAUT, It is time to take a stand September 1985, page 1.

to have a more profound definition of the essence and nature of higher education, other than in mere economic and technological terms. "One of the most important aspects of a democratic society is that citizens are allowed to develop their full potential through a quality system of higher education which is open and accessible to all who can benefit".⁸⁸

Quality and accessibility are considered to be the two pillars of university. This is so presuming that higher education does have some intrinsic value, beyond its economic value. But this cannot be so unless universities preserve both academic freedom and institutional autonomy:

Academic freedom means the freedom of those in the university community to express ideas, to write, to teach, and to suffer no ill consequences for doing so... Freedom of expression, and freedom of ideas, are the essential function of university. Without academic freedom the university cannot exist. University Autonomy means the ability of the university to govern itself while at the same time remaining accountable to society as a whole. University autonomy, or self-governance, is usually considered to be essential to academic freedom.⁸⁹

To the CAUT, access to quality education is a right for every citizen and that to ration this commodity "wastes our human resources and will ultimately lead to a loss of productive capacity for the country as a whole".⁹⁰ Likewise,

88- Ibid.; page i.

89- CAUT Special Report "The University Who needs It?"

90- CAUT, It is time to take a stand September 1985, page 13.

suggestions of cutting the budget of the social sciences and the humanities, to prop up the more scientific and technological domains, are not satisfactory at all:

This is a false solution which will lead to more problems. The social sciences allow us to understand ourselves, other cultures, societies and economies. The humanities are essential to the development of citizenship, culture, and awareness of the traditional knowledge of western society... There is a widespread feeling in North America that all university students should be exposed to courses to help them understand their own society and those of our friends and competitors."91

Already, a new definition of the social sciences is arising; one where this "science" has become "useful", even in economic terms. Humanities do not serve as a field where those societal contradictions emerge; where political and social conscientization occurs; where the fundamentals of the actual state of affairs is put on trial; where an authentic centers of critical debate are sustained independently of the dominant ideology.92 As a result, it foresees post-secondary education's role as one that is inextricably connected with the changes of the future; that is, one where it is relevant:

...the world of the 21st century is going to be a very technological, information oriented society. As a society, we must start now to plan to meet that new world...We must have a workforce capable of meeting the demands of rapid change...We must have the research capacity available to enable us

91- Ibid.; page 17.

92- Although the CAUT does represent university teachers, there exists within this community a number of professors who do elaborate further on the role of the social sciences and humanities. We will be considering the views of social scientists more seriously in another chapter.

to exploit such changes and to understand the impact of those changes on the society itself.⁹³

Although higher education has an impact on the individual, it is assumed that post-secondary education serves the need of the polity and the economy. To the teachers, the interrelationship between university and economy will become more important than ever as the economy adjusts to technological change: "The Canadian economy is clearly changing. It is inconceivable that we will be able to compete successfully without increasing university graduates and university-based research...the universities of Canada will have to play a central role if solutions are to be found".⁹⁴

Another element of their "discourse" has to do with university-private sector links; a fundamental characteristic of the industrial/functional approach as has been established in the earlier chapters: "The contributions of Canadian companies to research must increase if we are to be taken seriously as an economically advanced nation. The universities can help this national effort if they are given the tools and the accompanying funding".⁹⁵

Nonetheless, as we have already said previously, the teachers seemed to insist on the importance of the social

93- Ibid.; page 14.

94- CAUT Forum Notes.

95- Ibid.

sciences and humanities: "Technological development without concurrent development in other areas such as the humanities and the social sciences will lead us away from our democratic tradition. Technological development for its own sake must not be allowed to occur."⁹⁶

This aspect of their discourse is important, although not stressed as significantly as other aspects. It is important because it is the one aspect that differs from the opinions expressed in the earlier chapters. It is, perhaps, a recognition that there exists important societal problems which are not being dealt with adequately by the actual system, that this specific field of study has more to do with the human aspects of life than with the constant need for a more efficient and prosperous economy. It also implies some measure of academic freedom and autonomy, not subject to the political whims of the day. This is why, although many of their justifications fit the industrial/functional paradigm, their approach seems to look beyond, thus inadvertently contributing to a more authentic debate on the future of higher education.

96- Ibid.

b) National Consortium of Scientific and Educational Societies

The Consortium is a temporary organizations representing, as the name suggests, a number of scientific and educational societies in Canada.⁹⁷ In its most recent initiative, it attempted to contact all the Members of Parliament in the Canadian House of Commons to educate them on the impact of underfunding and on solutions of redress. The literature produced and analyzed here was used as background for the lobbying members of the Consortium.⁹⁸

Let us note, in passing, that the Consortium is not greater than the sum of its parts. That is individual members are more akin to their particular societies than to the National Consortium. As well, there does exists some fundamental differences in opinion as a result of this.

Thus, it would be tautological to affirm that this group is mostly concerned with the crisis as one of underfunding. However, what is important to note is the development of a "balanced" approach. That is, an approach that suggests that social sciences and the basic and independent research performed at university are fundamental in maintaining a healthy post-secondary sector. Healthy in the sense that only with appropriate long-term core funding, for the core

97- The CAUT is also a member of the Consortium.

98- I participated in the lobbying exercise held in late January.

undertaking, will the post-secondary sector be able to answer the new economic and technological demands being placed on colleges and universities in Canada and Ontario.

As participants to three major national consultations, namely the National Science and Technology Policy Forum, held in June 1986, the National Forum on Post-secondary Education, October 1986, and the National Conference on Technology and Innovation, January 1988, the members consistently reached the following conclusion: "The capacity of Canadian universities to train qualified individuals, to produce new knowledge and to disseminate it is fundamental to the future well-being of this country."⁹⁹

Already, we begin to see that, for the consortium, for post-secondary education to perform a function it must be relevant. This is further substantiated in their insistence on the role of the post-secondary sector as centres for Research and Development. As a group, they deplore the fact that Canada continues to lag seriously behind all other western industrialized countries in funding R & D:

Canada's universities are a vital part of any research and development strategy. However, they are currently facing a grave financial crisis which jeopardizes this role.¹⁰⁰

⁹⁹- Lobbying background document for week of January 25-29, 1988.

¹⁰⁰- Ibid.

Underfunding is a very serious crisis in economic and technological terms:

It will not help Canada become more competitive. Other countries, facing the same economic problems as Canada, are increasing the funding for research and higher education... With our present policies, we may well master the deficit in the 1990s at the expense of falling an entire technological generation behind our competitors.¹⁰¹

Concerning the form of funding, the members of the consortium support the idea of increasing industry-university links, however, the development of a working relationship with the private-sector is not sufficient. It does not satisfy the need for a research and development strategy in which the post-secondary sector would inextricably be a part of:

University-Industry research tends to be targeted in nature and this orientation, combined with proportionately fewer funds becoming available for the most basic or curiosity-driven research, may ultimately hinder our technological competitiveness and our ability to train our future scientists and engineers. As with many other funding issues, a balance between competing demands is necessary.

A balance between competing demands means a balance between the long-term function of higher education and the short-term and more utilitarian demands on the post-secondary sector. The problem being that for many institutions this is paradoxical. Perhaps, an analysis of their vocabulary on

101- Ibid.

the issue of funding the social sciences and humanities will provide a better illustration of the paradox.

Indeed, it would seem that insistence on the long-term core undertaking of universities is an indication of a deeper understanding of higher education. And other than the basic research role of universities and colleges, the social sciences are often pointed out as examples of that deeper understanding. Unfortunately, it does not necessarily follow that the focus on the importance on the social sciences and the humanities escapes the grips of the industrial/functional approach to the future of higher education. As it has been seen earlier in this chapter, there seems to develop a new interpretation of the "role" or "function" of the social sciences and humanities; the Consortium appears to be a carrier of this new interpretation.

For the purpose of this paper, there are three interesting and pertinent aspects of this new interpretation. First, is the concern for competitiveness. To the consortium, a national science and technology policy depends to a large extent on the government's willingness to capitalize on the social sciences and humanities because "...Research in the social sciences and the humanities is vital to achieving social and economic development and enhanced competitiveness on world markets.", "Success in world markets requires knowledge of the cultures, languages,

traditions, economic capacity and management techniques of Canada's trading partners..."¹⁰²

Another concern has to do with the ability to apply and introduce new technologies. According to the Consortium, research in the social sciences and the humanities should be considered as critical in the establishment of policies that seek to achieve better equilibrium between efforts to develop technologies and to ensure their diffusion:

Despite substantial recent efforts made by government and industry to develop and adopt new technologies, the diffusion of innovations has been slow and sporadic. The impediments to this diffusion are not exclusively of a technical nature. The factors at play are economic, social and cultural: quality of management, organizational design, consumption patterns, life-style changes, labour relations, and modifications of the role of government.¹⁰³

And, apparently, only a fraction of the economic returns anticipated have been realized by firms that have adopted new technologies. The Consortium remarks that expectations concerning the productivity and growth enhancement potential of these technologies have not been met. Why? "Because these technologies have often been introduced with little regard for, or understanding of, their relationship to the work environment and the needs and capacities of the labour force. Technological change is a social process with a technical component; it is imperative that we exploit fully

¹⁰²- Ibid.

¹⁰³- Ibid.

our research capacity in the social sciences and humanities if the cultural, social, and economic opportunities of technological change are to materialize..."104

Finally, in deploring cuts, for the past ten years, in the Social Sciences and Humanities Research Council of Canada's budget, it is contended that there are fundamental, moral, ethical and legal questions provoked by scientific developments in such fields as biotechnology and human reproduction that "...can only be dealt with by philosophers, legal experts and other scholars who can best shed light on the legal, political and economic implications of the developments".105 This is indeed an industrial/functional approach to the social sciences and the humanities; a field that had long been regarded as rather antithetical to the short-term demands on higher education, and to the planning of research and development strategies.

As has been observed, it is mostly the "within" of the post-secondary sector elements that are engaged in the redefining process of this field, as well as in the reconceptualization of the nature and role of universities as one which implies balance. Unfortunately, in this search for balance, the debate on the crisis of post-secondary education and the future of higher education continues to be confined conceptually to the dominant paradigm and the

104- Ibid.

105- Ibid.

industrial/functional approach. This is so because the crisis is seen as one of relevance, an interpretation which has gained increasing public notoriety, and is now dealt with in the political arena. This phenomena has led to the transformation of the debate to fit the institutional infrastructure of Canadian society, and is thus subjected to the present dominant ideological framework.

3) What Are The People of Ontario Saying?

Democratic or not, it is a fact of modern Canadian pluralist society that the people often have little say in most matters of such importance. It is, in fact, the most fatal ironic situation when a societal debate, such as the one concerning the future of education, develops without the participation of those people living in the environment we seek to improve. But it is not surprising, since it seems that the system's efficiency requirements are the only true concerns.

Nevertheless, in essence, it is the people that should be concerned with in this debate. Thus, it seems all the more appropriate that our discussion not ignore their opinions and their vision, even though they do not necessarily constitute the "within" elements of the post-secondary network as we know it. In the context of this study of the dominant conceptual approach to the future of higher education, it seem fitting that public expectations concerning post-secondary education system and funding requirements be analyzed.

Our review of public expectations, here, does not do justice to the full realm of public opinions directly or indirectly related to this issue. However, through the findings of an Ontario Institute for Studies in Education survey on public attitudes towards education in Ontario, we

were able to detect, within the population, a sense of what we have referred to as the "truer" debate on the essence and nature of higher education.¹⁰⁶ In this survey, we are provided with a profile of general public and specific group attitudes regarding currently proposed educational reforms, such as we find in the area of post-secondary education in Ontario.

One of the most significant findings of the survey is that, in 1986, 48% of respondents favored increases in colleges and universities spending, 61% (as opposed to 34% in 1979) of respondents rated university and college education as "important", while the proportion of those who thought it was "not so important" declined from 23% in 1979 to 7% in 1986.¹⁰⁷ This is significant for many reasons, but in the context of our discussion, it is so because it demonstrates the fact that indeed if the question of the future of higher education has become political, this is corroborated by the fact that more people believe that it is an important issue for our society.

But even more significant is the interpretation of reason for providing post-secondary education. The survey sought to see the amount of those who value PSE as a means to

106- The OISE Survey of Educational Issues began in 1978 and has been "the only regularly administered, publicly disseminated survey of public attitudes towards educational policy options in Canada".

107- Livingston, D.W. et als. OISE 1986: Public Attitudes Towards Education in Ontario.

economic returns.¹⁰⁸ The options being 1) that the number of places in university should be based on the need for graduates in the workforce, or 2) university should be provided for every citizen with the ability and interest.

To the surprise of the authors of the survey, they found that as much as two-thirds of the respondents supported the second option. To the analysts, this meant that many do regard higher education "as a value in itself, not primarily as a means to an economic end".

In the long-run, the fact that a majority of the public values higher education as an end in itself has distinctive and important implications. There is growing documentation of decreasing returns to investment in PSE as revealed by increases in underemployment rates among graduates and declining income differentials...This implies a similar decline in the economic benefits of expanding tertiary education at the societal level. In this context, if economic value is the central concern, both demand for expanding the number of places in post-secondary institutions and public political support for these institutions might be expected to fall off, if the situation persists and becomes more widely perceived...

In contrast, our findings suggest that support will not decline over the long term because higher education is valued intrinsically, not only for its economic benefits.¹⁰⁹

This is most interesting and would seem to indicate that all those who have attempted to convince the political community of the crisis in underfunding have gone about it the wrong way. That is, political justification is not found only in the economic benefits that result from public

108- Ibid.; page 5.

109- Ibid.; page 6.

investment in the post-secondary education sector but with the public's interest in the intrinsic value of education. Could it be that the people are not fooled by all the industrial/functional rhetoric? Could it be, also, that the system has carried values which are exclusive to its search for efficiency?

Regardless, it is apparent that the paradigm of relevance in interpreting the crisis and the industrial/functional to the future of higher education is predominant; as much with the "within" elements of university than with other interveners. The consequence being, in this case, that a paradoxical vision of higher education emerges, and this under the label of a balanced-approach.

CHAPTER 4: UNIVERSITY MANAGEMENT AND THE CRISIS

The dominant interpretations of the crisis of PSE and the industrial/functional approach to the future of higher education that it produces has influenced in a very direct way the orientation of the debate in the political sphere on the issue in Ontario, and in much of Canada, with some regional differences. Much of this debate has centered on the influence of external factors --such as funding, prioritization, vision-- in relation to post-secondary education as an industry. And this by various groups and

individuals who have expressed their preoccupations in the public realm. But how do the people and groups who study, in a scientific and empirical manner, making higher education almost a discipline in itself, feel about the crisis? What do they contribute to the debate in terms of explanation and interpretation of the crisis and of vision for the future of post-secondary education in Canada?

Indeed, although the study of higher education as a discipline in Canada is fairly new, there is however some notable contributions. For example and most noteworthy is The Canadian Journal of Higher Education published by the Canadian Society for the Study of Higher Education. The Journal is "intended to serve as a medium of communication

among persons directly involved in higher education in Canada, or deeply interested in this field."

There is also the monograph dedicated to the participants of the National Forum on Post-Secondary Education held in Saskatoon entitled Education Canada: Higher Education on the Brink, edited by Gilles Paquet (Dean of the Faculty of Administration Sciences of the University of Ottawa) and his colleague Max von Zur-Muehlen and published by the Canadian Higher Education Research Network, CHERN (of which Zur-Muehlen was executive director in 1985-87). The two principal sources of material for this document were the 1985 Conference "Higher Education: Crisis or Opportunity?" and the 1986 conference "Managing Universities: Issues and Solutions". CHERN, based at the University of Ottawa, attempts to promote analysis and documentation on Canadian higher education issues, and links the research community through new information technologies.

In this chapter, we will explore mainly the views as expressed through latter contribution noted above. It is considered as a most recent publication with most up-to-date information and analysis on the issue of the crisis of higher education. It will furnish a new insight and perspective as to how this issue may be understood. It is mostly concerned with the crisis as one of management of post-secondary

education institutions.¹¹⁰ This concern about management of our post-secondary institutions has become a popular issue, as this segment of a Sunday Star Editorial reveals:

Our universities continue to wallow in crisis, unable to define what they are or where they are going. What will become of them? If given a higher priority by governments, will they become regional and national instruments of survival in a competitive world? This is the hope, reality may be different.

The universities -- autonomous and medieval in tradition -- blame governments for starving them of funds. Underfunding has been their battle cry for the past 15 years. However, universities must also share some of the blame responding poorly to government concerns and failing to come to grips with such central questions as: When will they put their own house in order? And, when will they set an agenda of priorities?

It is an essential premise, in Higher Education on the Brink, that the future of higher education is primarily dependent on the well-being of the traditional post-secondary education institution, the university, and its perpetuation as a viable, efficient, autonomous and independent enterprise. In fact, it is under this title "enterprise", that they undertake their analysis of the main problems facing the universities. Their argumentation goes beyond mere problems of underfunding to attempt to answer what, according to many outside the university, appear to be a lack

110- "...the editors believe that the main questions of concerns to the higher education enterprise have been addressed." Gilles Paquet and Max von Zur-Muehlen, ed., Education Canada: Higher Education on the Brink (Ottawa: CHERN, 1987), page i.

of responsiveness, on their part, "to get their house in order first".

This opinion is also found in the editorial of the third edition of the 1987 series of The Canadian Journal of Higher Education as expressed by Paul Gallagher:

They 'the governments' obviously do not have the confidence that our post-secondary institutions would reform or redirect themselves in a politically acceptable manner and consistent with a politically realistic timetable. And they know that public opinion does not support the infusion of significantly more money into post-secondary education as it now functions. Governments in Canada, by their actions, seem to agree with Donald Macdonald who expressed disenchantment with the Canadian academic community and its inability, despite its stature and resources, to address its own problems with any real measure of imagination.¹¹¹

In essence, the monograph is mostly critical of the way that the university institution has developed in the last 20 years, and this in terms of management. The emergence of new models of planning, operating, and decision making has altered fundamentally the way universities respond to the changing needs and requirements of higher education; it has made it inefficient. As a result, they have managed themselves into irrelevance.

There is no question that, in terms of management, who critique is pertinent. However, as will be demonstrated, it is the direct association of the future of higher education

¹¹¹- An Editorial by Paul Gallagher. "The National Forum... What Legacy?" in The Canadian Journal of Higher Education Vol. XVII, no. 3, 1987.

with the future of the institution which falls within our problematique as established in the introduction. The interpretation, of the various contributors to this monograph, of the nature and role of universities as viable institutions is inadvertantly linked with the nature and role of higher education.

Thus efficiency of the university "enterprise" means efficiency in the endeavour of higher education; this seems to limit considerably the conception and evolution of higher education to the solutions offered by the logic of rational management and the idea of relevance. Rational management, in the context of the political priorities of the day, means that the industrial/functional approach must again predominate.

The purpose of this demonstration is to illustrate the pervasive impact of economy on the various analyses made even by those who take higher education at heart. The work of these very prominent authors, members of the higher education community themselves, contribute greatly to the perception that the public may come to have in understanding the crisis and the attitude that the government of Ontario adopts in establishing new post-secondary education policies. Policy-making at the governmental level, in Ontario and Canada, is definitely influenced by such contributions; this is significant for the future of higher education in Ontario.

We will, thus, proceed with a discussion on what these authors understand as the nature and role of post-secondary institutions in a modern society such as Canada in the midst of a technological and information revolution and the changes that it brings about. Then, we will analyze how they perceive the role of funding and strategic planning in developing Ontario and Canada's higher education potential. We will also describe what they consider the crisis, the problems of management that universities are facing. This last portion will provide some interesting information on the impact of modernization and industrialization on the main institution of higher education, the university.

1) Nature and Role of PSE

In describing the nature and role of PSE, the authors clearly demonstrate a bias toward the "national approach" as a way to redress the crisis. Many of them reasserted, as was developed in Chapter 2, that "the idea that education could be devolved to local jurisdiction entirely would be, from an economic and efficiency point of view, wrong."¹¹² The provincialization of the enterprise does not help it get back on track, so to speak, and makes it difficult to manage from a political point of view.

This being said, many of them reiterated the need for a national strategy given that post-secondary education should be considered as a domain requiring political prioritization for the country. Education generates benefits for the individual but, as well, it does contribute largely to society for there are direct benefits to it:

Therefore, PSE is a mixed good, and calls for mixed funding, mixed financing, both private and public, and involvement not only by the provinces but also by the federal government. ¹¹³

It is, thus the responsibility of the federal government as well to recognize its responsibility in helping the

¹¹²- Gilles Paquet, "Post-Secondary Education: an Enterprise less than Optimally Managed" in Paquet and Zur-Muehlen Education Canada: Higher Education on the Brink (Ottawa, CHERN, 1987), page 3. From a text presented to the Standing Senate Committee on National Finance on October 31, 1985.

¹¹³- Ibid.; page 5.

educational system not only to produce "a more enlightened populace but also to serve the economy better..."114

The importance of the role of government in post-secondary education having been established, what then is the role and nature of the university, the institution:

Nous avons hérité du XIX siècle l'idée que le progrès de la connaissance et la formation des jeunes cerveaux pouvaient le mieux se réaliser par la congrégation d'expertise rares et chères à l'intérieur d'institutions spécialisées de haut savoir; les universités.115

But according to Paquet, universities are facing increasing competition in the forming of minds, their monopoly is threatened, which means that they must improve their product:

les universités doivent en réaction se transformer en organisation concurrentielles tant par la variété, la qualité que le prix des services qu'elles offrent à la société. Autrement dit, les firmes privées incorporent des dimensions éducatives, les entreprises d'enseignement supérieur doivent intégrer des dimensions commerciales.116

In other words, the nature and role of universities has been affected so that a rationalization of its structures and its management appears inevitable. The industrial/functional

114- Ibid.; page 6.

115- "A ce monopole de fait étaient associés une culture et des mode de fonctionnement singuliers hors la société civile. Selon cette vision du monde, le progrès des connaissances est simple écho de la liberté de pensée et d'expression". Gilles Paquet, "La firme universitaire: préliminaires aventureux à une analyse stratégique" in Education Canada: Higher Education on the Brink, page 150.

116- Ibid.; page 151.

approach is becoming more and more apparent in the thinking of these authors.117

Another contributor, David Husband, provides us with an even clearer definition of the nature and role of post-secondary education within the dominant paradigm:

...our universities and colleges must be at the forefront of the re-orientation of our economy to the production of goods and services involving a high degree of design and consumer differentiation. University-based research should intensify, particularly that component having strong relevance to industry use.118

As a result, the crisis in PSE is interpreted as one where the institutions of higher education have become unable to sustain the increasing demands of modern economic life and the requirements for better and more applicable research for development purposes and for the new labour market requirements..."the universities have become in some measure irrelevant or outdated in contemporary society. This relates

117- Although, in the case of Paquet, there seems to be a significant paradox in his several contributions. On the one hand, he argues against the domination of positivist models in social sciences, but on the other he offers just that as an alternative.

118- David Husband is President of the Canada East-West Centre Ltd., and former Policy Coordinator for the Macdonald Royal Commission. This passage was taken from chapter II "Does the Post-secondary system need a shock?" in Education Canada: Higher Education on the Brink, page 42. "...if Canadians are worried about the quality of higher education, a shock to the system may be necessary to considerations of significant internal problems".

to the notion of increasing the relationship between higher education and the job market".119

The universities are thus confronted with a crisis of relevance because of its management problems, the specificity of which we will discuss later in this chapter. What then is a solution to ensure that universities, in the future, gain the respect of the public and of the political and economic community? According to the authors, they must become functional in the industrial sense of the word, thus they should rationalize, like a firm does. The authors refer here mostly to the practice of Strategic Planning.120 Gilles Paquet even attempts to apply the reasoning of the model of the "firm" to demonstrate what the university enterprise should do.121

For most of them, the means for achieving Strategic Planning reflective of the political priorities of the day is through the financial system's allocation process:

119- Robert Pike in reaction to David Slater's "the Crisis will get worse if change doesn't occur" in Education Canada: Higher Education on the Brink, page 23. Robert Pike is professor of sociology at Queen's University.

120- "Despite reluctance on the part of academics, strategic planning has become an important buzzword in universities and has been offered as a solution to some of the problems currently facing higher education." Cynthia Hardy, Chapter VII "Evaluations: Strategic Planning" in Education Canada: Higher Education on the Brink, page 211.

121- "Les modes de coordination politique et bureaucratique ont pour objet souvent inavoué de forcer les universités à s'ajuster aux besoins de la société et à répondre ouvertement de leur gestion académique et financière" Gilles Paquet, page 153.

...a strategy that would, and could operate mainly through funding--strategic funding that would force the PSE enterprise to attend to the necessary agenda by a effective use of the granting power and the accountability that can be built into funding. Government might choose, as they have tried to do but in a disjointed way, to develop more strategic funding.122

Effective funding also requires coordination at the system level, and for this the contributors advocated the creation of body of some form to perform that function at the national level, and to ensure that each institution develops specific comprehensive plans to enable this. Notice that many of the themes from previous chapter are recurring. This provides us with further proof that the debate on the future of PSE and of the crisis is limited in scope by the predominance of the paradigm of relevance and the industrial/functional approach.123

Cynthia Hardy is one of the few contributors that offered a somewhat critical point of view to this approach.

122- Gilles Paquet "Post-secondary Education--An Enterprise less than Optimally Managed" in Education Canada: Higher Education on the Brink, page 6.

123- On the economic pay offs " It has been pointed out that the only reason universities were able to expand in the 1960s was the result of a belief that spending money on higher education would be an investment in growth. This economic frame of reference still exists what has changed is the belief that universities can produce, and it is doubt about this ability to produce that is at least partially to blame for recent funding cuts. Ironically, the economic mentality probably resulted in too much growth in the 1960s, and too little in the 1980s." Cynthia Hardy, op cit., page 214.

She was mainly concerned with the problem of evaluation and Strategic Planning:

The problem with Strategic Planning is that it emphasizes one view of the world--the rational analytic view-- which appeals to our need for certainty and order. As a result, the more intangible side of management is dismissed as unimportant; but it may be that side which is crucial to effectiveness. What is lacking is an understanding of the art of management, not the science of planning which is already relatively well served.¹²⁴

Indeed, much more could be said about this.

¹²⁴- Cynthia Hardy is Assistant Professor of Management Policy at the Faculty of management, McGill University. op cit., page 218.

2) Problems of Management

Gilles Paquet summed up the argument as follows:

Our concern is management. The post-secondary education enterprise is probably less than optimally managed. That would be my careful statement to summarize our discussion...The optimal amount of coercion is not zero; everyone would agree with that. The question is whether we can find a way to scheme virtuously the enterprise to produce more per dollar; and to do it without, at the same time, introducing additional rigidities that would make it impossible for the post-secondary education enterprise to do its job.¹²⁵

In this case, Paquet was summarizing what he considered to be the overall consensus among the authors found in this monograph and the views expressed at those conferences which we enumerated earlier. We assert that this opinion constitutes a majority view amongst those studying the university as an enterprise.

William Sibley provided the most insightful contributions into what are considered the main problems of management of universities.¹²⁶ His interpretation of the crisis is essentially that governments have grown increasingly skeptical about the way in which universities are managing their affairs, thus they are less willing to provide additional funding. The reason for this problem of

¹²⁵- Introduction to Education Canada: Higher Education on the Brink, page 10.

¹²⁶- William Sibley is Past-Chairman of the Saskatchewan Grants Commission, former Vice-President (Academic) of Mount Allison University, and now Vice-President (Academic) of the University of Lethbridge.

management is that universities have imported into their structures and operations "modes of organization and of decision-making that are quite alien to its culture" and this with disastrous results. He refers, as an example, to the application of participatory democracy to the mode of decision-making. As a result of this, the governments have undertaken a method of slow strangulation that coerces (in a not-so-subtle way) the universities into reshaping themselves into politically desired directions by withholding funds and earmarking it.¹²⁷ It has had for secondary effect a loss of certain level of autonomy and independence.¹²⁸

One very important distinction is made by Sibley in his comments on autonomy and independence:

Autonomy is within our control in a sense which independence of freedom of action clearly is not. Its defence and preservation is our responsibility, and we need to ask how far our own actions have undermined its reality.¹²⁹

This is crucial because, starting from this premise, he develops a model of redress which is but a more efficient system of adaptation to the ever increasing hold that

127- William Sibley, Chapter V "Managing Universities: the Changing External Environment", op cit., page 121.

128- Independence and Autonomy "The ability of the enterprise as a whole to engage in sustained and rational reflection about its objectives; the capacity to reorient itself to meet changing circumstances; and, the will and power to redirect its resources and energies to make reorientation meaningful and effective", Sibley, op cit., page 123.

129- Ibid.; page 124.

governments have on post-secondary education institutions and higher education. He means autonomy in management and planning, and this autonomy should be directed by the mission that the university gives itself.¹³⁰

Thus, according to Sibley, there are three main sets of change agents that have affected the PSE enterprise:

"1) changes induced by the corporate and government sector, 2) the unity or integrity of the university as an organizational form has been fractured by the explosive growth of academic disciplines, and 3) the adoption of new modes of management and decision-making".¹³¹ Similar arguments are put forth by Buchbinder and Newson in The University Means Business. (we will discuss their arguments more specifically in Chapter 6.)

In the first set of change agents, he refers more specifically to the process of "slow strangulation" which affects freedom; increased earmarking of funds, which favors politically motivated decisions; the increased demand on the universities to provide a service undermining its research

130- "the system consumes energy, entertains and diverts, but goes nowhere. I see no possibility at all of such government formulating a mission that means anything, providing a clear sense of direction, turning the multiversity back into the university by shedding inappropriate units, restoring a sense of worth and meaning to what remains of the university community". Philip Slayton in op cit., page 137.

131- "These new modes of management and DM depart too far from certain principles inherent in the basic nature of university." Sibley, op cit., page 123.

and teaching capacities; and, finally, the increased links with the corporate world:

The result is that we begin to carry out someone else's agenda within someone else's time frame...academic values are becoming more and more irrelevant to decisions being made within academic institutions. The deeper moral sense that institutional purposes for which it was ordained are being quietly betrayed.¹³²

This is indeed a more than legitimate concern, one which we have time and again demonstrated in the earlier chapters of the paper. Sibley's comments are pertinent and touch to the core of the application of the paradigm of relevance and the industrial/functional approach in the 1980s. However, he is not satisfied with this single explanation of the crisis. He argues that there are internal problems that can only be attributed to the universities themselves which have brought about such a political approach in the actual debate on the future of higher education.

The first of these problems, the second set of change agents, is the fragmentation of the disciplines that has occurred during the 1960s and 1970s as a result of the massive expansion of post-secondary education institutions:

A major change which has come over the university scene in the past generation is a marked increase in the dominance of the role played by the discipline in the life and work of the individual faculty member, as contrasted with the place occupied by the institution or the enterprise.¹³³

132- Sibley, op cit., page 127.

133- Ibid.; page 127.

This resulted in a fundamental shift in dedication and focus of interest and loyalty, as there occurs a steady distancing of the specialties from one another and from the knowledge "imported from elementary and secondary education". This leads to a serious deterioration of the former sense of unity in mission and integrity of the university community.¹³⁴

Another major consequence, of the fragmentation of the disciplines, is the fragmentation of the decision-making process that comes with it. The growing split due to guild-like professionalism, leads the university to become increasingly fractured by expertise, rather than unified by it:

Universities have always had to operate in matrix structure: academics not only have horizontal ties to their colleagues elsewhere in the same discipline but vertical links with the structure of their own enterprise...There are always difficulties in operating such a matrix but they become far greater as both the disciplines and the enterprise grow steadily more complex.¹³⁵

Sibley notes that it is "small wonder" that universities and their organizational apparatus appear to have lost their way "...There is tremendous vitality in the disciplines, in the parts; but less and less cohesion on the whole".¹³⁶ Moreover

134- "There is less and less sense among the members of the enterprise of the life of the whole university...More and more, a modern university takes on the nature of a loose federation or a mere coalition, not that of a strongly unified and coherent organization." Sibley, op cit., page 128.

135- Ibid.; page 128.

136- Ibid.; page 131.

he notes, as some American authors have suggested, that there seems to be a increased willingness for some professional schools to be tempted to detach themselves from the central institutions in order to manage their own affairs.¹³⁷

The second problem, the third set of change agents, is the whole area of management and the decision-making process, beyond the conditions of fragmentation of the discipline. The author makes clear that although there is no way of controlling increased private sector and government involvement, and the expansion of the disciplines, this is an area which can be acted upon by the universities themselves..."I refer here to changes in the ways in which we manage our affairs and organize to make our decisions."¹³⁸

One of the changes in management has been the application "participatory democracy" in faculty and departmental affairs. From this concept, applied to university management, emerge the practice of "rotating headship" whereby everybody must have his turn..."the central purpose of which is to help every one attain his or

137- Quoting American sociologist Burton Clark "There is the very real possibility, in the not too distant future, of what is coming to be called as disaggregation--that is, virtual detachment from the university of certain faculties that are being drawn by strong external forces into orbits outside those of the enterprise." in Sibley, op.cit.; page 122.

138- "...most of these changes have had a deleterious effect on our capacity to govern ourselves in a lawlike and rational manner--that is to say, they have contributed greatly to the weakening of our autonomy. Our reputation and our fortunes have correspondingly suffered." Ibid.; page 131.

her fullest personal development".¹³⁹ He considers this practice inefficient for it provides no incentives and time to improve the departments from within.¹⁴⁰

The major consequences of this is that, inevitably the power shifts from academics to non-academics, as their job is usually of longer term. It prohibits from long-term planning and leads, more-or-less to "organized anarchy". In essence, it constitutes the application "of metaphors and analogies from the world of politics in university affairs which results in a circus atmosphere".

Another of the major changes, that have occurred in university management, is the adoption of "hordes" of rules and regulations. These replaced, always according to Sibley, the simple customs and conventions that existed originally..."Just as academics love to ape the politicians, so they delight in emulating the lawyers...process is more important than substance and procedure more significant than performance."¹⁴¹ Enough to make Max Weber roll over in his grave!!!

According to Sibley, and in a more philosophic tone, these new forms and procedures were alien tissue for ancient university foundations. Recognized as "places of liberty",

139- Ibid.; page 133.

140- Apparently, according to Sibley, this practice has also lead to a too rapid pace of turnovers in the headship or chairpersonship.

141- Ibid.; page 134.

for they had to fight for their privileges and liberties, the last two decades have been the scene where both students and faculty came to disown their privileges and to jettison these liberties:

One sees administrative manuals of hundreds of pages, detailing all the terms of reference and operational rules for scores and scores of committees. One sees a collective agreement of some 90 pages of minuscule type, the cost of administering which is surely formidable. Faculty meetings are rarely without some self-appointed expert on rules of order, and frequent resort to what are often unnecessary complications in such rules which creates still more inefficiency."¹⁴²

Decision-making is a central issue to Sibley; it is at the core of the problems of management today, thus at the core of the loss of autonomy and independence, of confidence and credibility. It is an issue which must be resolved if the university enterprise is to regain the status that once made it a most honorable institution.

The issues addressed by Sibley can, with some particular and minor reservations, be applied as a generalization to most universities in Ontario, Canada, the United States and beyond; there seems to be little doubt about the phenomena that he has so diligently described. However, it is doubtful that the crisis in management of universities constitutes the whole of the crisis that faces higher education overall. And this seems to be the trap in which the authors of this

¹⁴²- Ibid.; page 135.

monograph, which represent a handsome segment of those who study the university as an enterprise, have fallen into.

It is, nevertheless, an attractive trap; one which satisfies the need for concrete solutions that apply to "real life". The problem being that, more often than not, pragmatic solutions are limited in scope and often do not withstand the test of time. For there are no guarantees in this modern world; it is more than just the institutionalized form of higher education that is biting the dust. And this regardless of the logic of management and efficiency.

Furthermore to believe that universities, as Sibley does, can ever become autonomous and independent, according to a mission they have themselves conjured up, is what seems to be greatest paradox in his analysis and in the analysis of the rest of the contributors. One need only look at the propositions for restructuring the decision-making process, to understand that they too, the institutions of higher education, are more than ever subjected to a concept of their future management capabilities that smacks of the industrial/functional approach for they must seek to become relevant; much like the interpretations on which we have elaborated upon previous to this chapter.

Thus in concluding, let us note the suggestions of Sibley concerning the establishment of new principles of decision-making at the university. First is knowledge of the issues; second is efficient execution; and third, but not

least, is "to pay regards to two fundamental sets of interests: 1) those pertaining to the special requirements of the academic disciplines; 2) those pertaining to the interest of the "stakeholders" of the university".¹⁴³

The stakeholders are the students, the public, and the governments. This would seem more than appropriate, but in the context of the political realities of the day, one in which those most powerful interests manage to dominate the political agenda, thus the funding agenda, it is indeed "he who pays the piper, calls the tune".

143- "The third principle requires that, somewhere at the centre of the institution's DM, there must be adequate reconciliation both of the major requirements of the academic enterprise and of the stakeholder's interests that must be served by the university." Ibid.; page 141.

CHAPTER 5: THE SOCIAL SCIENCES AND THE PARADOX

Of all the issues that have been discussed so far, from the extent of government participation in PSE to the forms of funding required to achieve politically acceptable goals, from the question of specialization and fragmentation of the disciplines to the crisis in management of universities, and so on, little has been said of the problem that the disciplines themselves face, and of the impact of that on the future of higher education. How is the research and teaching potential of higher education institutions, the universities and colleges, affected by the crisis, however different the versions and the interpretations?

The social sciences and the humanities are of those most important disciplines, at higher education institutions, who have come to struggle to survive in this period of 15 years of contraction in available resources. This "dark" period has had considerable impact on the social sciences and humanities' capacity to be considered as a serious and viable discipline in the eyes of the public, of politicians, and of the social sciences and humanities community itself as well. They continue to struggle to have their discipline recognized as being relevant.

In fact, the social sciences and humanities' capacity and potential in Canada has deteriorated at a rapid pace; this decline, or relative no-growth, is correlated to its

proportional decline in the agenda of government budgeting and resource allocation processes and priorities. In other words, although the more "scientific and technologically relevant" fields of research and teaching have suffered heavily during this same period, they have continued to enjoy massive political, private sector, and public support. This has meant that they have remained high on the political agenda; and this because they were more closely tailored to the requirements of the industrial/functional approach and figured as more relevant.

For the purpose of this paper, and in light of this critique on the industrial/functional approach to the future of higher education, the significance of this trend is that it has led to a relationship, between society and the social sciences, that can be characterized by the great paradox. And this paradox has established itself as a magnificent barrier for the improvement, in post-secondary institutions, of the contribution of these disciplines to society. To ignore this paradox is, in essence, to deny the possibility of an authentic debate on the future of higher education in Canada and Ontario.

Thus in the present context, where the social sciences has come to search more and more for political and public recognition, it is a paradox that, more often than not, the nature and essence of social science and humanities research and teaching is antithetical to the political and economic

priorities of the government of the day. There often exist a polemical relationship between what the government considers the immediate needs of society and the political actions that come thereof, and what the social science and humanities community establishes are the true needs of society.

It is sure that this paradox is not so acute in all circumstances, for financial support to this discipline does exist and has become so varied, and so many groups have become so involved in this discipline, that it would be naive to be categorical for all of social science and humanities teaching and research. Much depends on the basic substance of the sub-discipline.

However, it can assuredly be said that in the process of recognition of the overall problems of social sciences and humanities in Canada and Ontario, there has developed a particular approach that seeks to resolve the differences between the society and the discipline per se. It is often an exercise of recognizing the so-called political and economic limitations of "real life". Again, in the case of the social sciences, the paradigm of relevance has lead to an industrial/functional approach to the future of higher education.

Notwithstanding this paradox, it is true that it is in the understanding of the problems identified by social sciences studies that we can discover the roots for the adoption of new, different and innovative approaches to the

future of society. The social sciences and the humanities may constitute the missing link which, if applied properly, would reduce the dominance of the industrial/functional approach in the establishment of priorities by the governments.

We will begin this chapter with an outline of what are considered the major problems facing the social sciences and humanities in Canada in the 1980s. Secondly, we will analyze the modality of the struggle for recognition on the part of the social sciences and humanities. We will demonstrate how this discipline is subjected to an evaluation mix by particular public and professional expectations that forces it to react and justify itself in the eyes of the Canadian polity and society. The justification process often involves demonstrating the relevance and benefits of teaching and research in this field; but the measure of their success is determined not by the professionals themselves and by the fact that new knowledge was created but by their perceived relevance to society, which is known to differ. Thus the origins of the paradox.

Thirdly, we will establish what may be considered as the balanced approach to the future of social sciences and humanities, the ultimate compromise. This compromise stems directly from the fact that social sciences and the humanities are so dependent on public funds, thus they must adjust to the limitation and to the scope that the type of

funding provides. Much like the great compromise that the higher education community as a whole is subjected to, as demonstrated in earlier chapters.

Overall, we will attempt to demonstrate that despite the fact that the social sciences and humanities are being subtly forced to compromise, the fact remains that its nature and essence inextricably prepares the ground for alternatives approaches to the future of society, thus to the future of higher education. And that, in alliance with all the other fields, this disciplines offers new explanations of the relationships between the elements that compose the body of knowledge. It offers, as well, alternative models for policy formulation in the sphere of education for it is often critical of the present system.

Consequently, given that the industrial/functional approach is merely a product of the increase of knowledge that has been observed since the beginning of time, education, the communication of knowledge, is not and should not be subjected to the paradigms of "product". Education is bigger in scope and in essence; it cannot be reduced to averages like a service or a commodity.

This chapter is intended to provide only some of the basic criticism of the industrial/functional approach from the perspective of the social sciences and humanities' role in higher education. A more complete critique of the

Industrial/functional approach will be provided in the conclusion of this paper.

The sources of material for the production of this chapter are provided from two complementary documents. The first of these sources, are the conference proceedings from an October 1984 symposium held under the initiative of the Science Council of Canada. The proceedings were edited by John E. Trent and are entitled "Social Science Research in Canada: Stagnation or Regeneration". The second complementary document was, again, edited by John E. Trent, in collaboration with Paul Lamy; it is entitled Global Crisis and the Social Sciences: North American Perspectives. This document contains the proceedings of a UNESCO symposium on the "Fundamental Problems of, and Challenges for the Social Sciences in North America held in May 1983. The purpose of the conference "was to analyze the potential contributions of the Social Sciences in North America to the standing of the global problems of the last two decades of this Century."

There should be no doubt as to the relationship between the social sciences and humanities, its purpose, its goals, its essence, and higher education. This chapter should be read with this link in mind. Thus the relevance of the commentaries found in it.

1) The Social Sciences and the Crisis

The roots of the paradox in the link between the social sciences and humanities (SSH) and society lie in what may be termed as the "crisis of relevance". In other words, how are the needs and demands of society being served by the SSH? This theme was at the core of the discussion of the Science Council proceedings used as material for this chapter:

Its main aim [the conference] was to allow social scientists to discuss the status of their disciplines in the Canadian context and to evaluate the nature of their relationship with the decision-makers and the general public who are, or should be, the ultimate users of their findings.¹⁴⁴

As well, this theme reflected the concerns of the other main source of material for our discussion, the UNESCO conference:

...with the Social Sciences coming of age as the principal source of social knowledge, its relationships to the structures of power and wealth and the various sectorial interests in society have become of overriding importance. Problems range from the effective provision of policy advice to the adequate distribution of social research capacity. Social scientists are torn between the policy demands of decision-makers --especially to demands for relevance to national priorities-- and the larger responsibility for the policy needs of humanity for survival.¹⁴⁵

144- The Science Council of Canada was created in 1966 to evaluate Canada's resources, needs, and potential in terms of science and technology. It sought to elaborate basic principles and a philosophy for action that would guide the evolution of science in Canada. Foreword to Proceedings by Vairas Vikis-Freiberg Chairman of the organizational committee, and vice-chairman of the Council, page 8.

145- John E. Trent and Paul Lamy, Global Crisis and the Social Sciences: North American Perspectives (UNESCO, University of Ottawa Press, 1984), page 4.

The problem being, then, the difference between what the political sphere has determined to be relevant and what the social sciences community considers as relevant. This problem was addressed by those two conferences and it should be recognized that there is considerable consensus within the social science community concerning it.

Moreover, it is the perceived irrelevance as determined by the polity that has had great deleterious effects on the capacity of this discipline to produce what it itself considers relevant. A corollary problem to this is that there has developed a great sense of confusion as to whom, then, should be in charge of determining relevance.¹⁴⁶

The problems of relevance should be understood, though, in light of the bigger picture; that is, what are, and have become, the social sciences and what are the historical circumstances that have lead to the problem. It is in the evolution of the social sciences and of society that we find the problem of relevance as growing in importance, to become what we consider today the crisis in the social sciences and humanities.

According to Trent, the social sciences are a major "enterprise" in Canada; "It is the science that refers to the

146- "There is no longer any consensus about who should be making decisions about research priorities and about which criteria should be used for those decisions." Proceedings, Science Council of Canada, page 243.

systemic study of human relationships and behaviour". They are comprised of a number of sub-disciplines such as Political Science, Anthropology, Economics, Education, etc...¹⁴⁷ As well, there are the Arts and Humanities such as English, French, Visual and Performing Arts, etc...

It is estimated that as much as \$2.2 billion of the \$5.4 billion spent annually on universities is spent on social

← science. University scholarship supports approximately 130 social science journals and, at one level of activity or another, 170 centres and institutes. In addition, there are social science departments in community colleges and CEGEPS, and teachers of social sciences in High Schools. Some 10 off-campus, non-profit research institutes, and approximately the same number of commercial operations, have also been created. Canada spends another \$600 million a year on R & D and related scientific activities in the social sciences. Thus the social sciences are a \$ billion-a-year industry.¹⁴⁸

In addition, 80% of Social Sciences teaching and research occurs at universities. Thus the analytical link between the problems of this discipline and those of higher education institutions. As well, it should be noted that it is very difficult to measure the size and scope of the social

¹⁴⁷- In Canada, Economics, Sociology, Anthropology, Archeology, Political Science, Psychology, History, Geography, Law, Administrative Sciences, Education, Industrial Relations, Peace Research, Regional and Urban Studies, Home Economics, Area Studies (Latin America, Caribbean, African, European, Soviet and Eastern European, and Asian Studies), Demography, Criminology, Socio-Linguistics, and Communication are recognized as branches of Social Science by the SSHRC and represented by the Social Science Federation of Canada. Proceedings, page 17.

¹⁴⁸- Ibid.; page 17.

sciences and humanities, and the importance of their existence for society. Let us just say that, regardless of quantifiability, they have been a strong presence in the development of higher education institutions during the 1960s and 1970s in Canada and Ontario.

But regardless of their importance, this discipline has come to suffer due to the emergence of new political and economic priorities, and due to new circumstances which have had considerable impact on the health, well-being, and continuity of the social sciences in the 1980s. In essence, the new circumstances are characterized by the emergence of the industrial/functional approach to the future of higher education.

One of those circumstances is the emergent importance of a national or provincial, whatever the case, science policy. It is noted that some 30 years ago scientific research and other intellectual pursuits were not considered as politically relevant, and were treated as "cultural" activities. But as science and technology were growing in importance of political relevance, and as "engines" of economic growth and competitiveness... "they the leaders came to see research and development as vital to economic achievement", thus "it became necessary for governments to become involved in tailoring knowledge output to perceived knowledge needs."¹⁴⁹

¹⁴⁹- Trent in Proceedings, page 22.

As a result, governments have attempted to orient research toward national objectives, while the scientific community was struggling to maintain some sense of control over the allocation of resources. This problem was doubled for the social sciences for it was an area of research that was relatively young especially outside the university and which required even greater freedom than the pure and applied sciences.

Coupled with the establishment of government priorities in research, the economic recession of the 1970s and early 1980s, which had for effect increased international economic competition, put pressure on government budget's allocation processes and priorities to the extent that affected greatly the social sciences:

In their attempt to stimulate economic growth, governments have generally looked for a "quick technological fix". Social and cultural issues have been neglected, including social science research and even the social component of economic growth. Governments have also been forced to allocate scarce funds to "urgent" priorities and to large, insistent groups. Academic social science research seldom falls into any of these categories.¹⁵⁰

In times of budget restraints, allocation of new resources is usually directed towards research that is more policy-relevant and dealing with national or provincial issues:

Thus, the social sciences are expected to produce perceptible economic benefits or to help

¹⁵⁰- Ibid.; page 23.

governments achieve goals and solve problems. Because of its diffuse and often imperceptible effects and the difficulty of measuring its rate of return, social sciences is often found wanting according to this quantitative approach.¹⁵¹

On top of that, the social sciences are often blamed for not having learned to convince governments and the public about their value and usefulness as intellectual foundations for society and as instruments of change.

These external political and economic circumstances have also lead to internal circumstances where the social sciences have never been given a chance to build to become functional and adapt to the new world environment. Thus the social sciences have come to face both institutional structural environment problems as well as epistemological problems, where the community itself has become disorganized and lacking in identity for itself.

Institutionally and structurally, the universities (as we have seen in chapter 4) are badly organized and funded for the production of research..."They lack the structures, the funding, the support staff, and the influx of young scholars needed for the social sciences to fulfill their potential for social knowledge production."¹⁵² Moreover, the social sciences have received far less funding than have the natural sciences. A significant deterioration has occurred in the ability of the social science and humanities' faculties to

151- Ibid.; page 23.

152- Ibid.; page 266.

perform their tasks adequately, more so than in any other area or disciplines at the university.

A major consequence of this has been the fragmentation of the research, the lack of indigenous research, the lack of inspiration and research excessively oriented towards the sub-disciplines rather than containing analysis helping to address social problems..."Put the other way around, Canada lacks social research that is interdisciplinary, applied, cumulative, Canadian, and profound."153

In terms of identity and purpose, these institutional and structural problems, and the political circumstances that brought them about, have had great consequences on the substance of social science. It is safe to assume that the problems of substance have been encountered in the United States as well. At least this is the reasoning behind this affirmation:

There is consensus that from a theoretical perspective the social sciences are presently in a state of suspended animation, a period of hiatus, perhaps best described as "post-positivism" and characterized by the expression of "after data, what?" The mood is one of questing for ways, on the one hand, to reintegrate normative and moral considerations and classical philosophical issues into the achievements of the behavioral revolution, and on the other hand, to develop means to put back together what scientific positivism has cast asunder so that social research might cope with holistic concepts and broad social problems requiring interdisciplinary approaches.154

153- Ibid.; page 260.

154- Trent and Lamy in Conference, page 3.

The logic of these arguments is derived from the assumption that state involvement, especially in controlling the purse strings, has led to a deterioration of the capacity of the social sciences to answer those questions that they consider relevant and that "mainstream social science has come to ignoring the radical critique of underlying structural factors in favour of incrementalism".¹⁵⁵

As a result, the underlying feeling is that if the social sciences are going to cope with the global agenda, as determined within their own community, there is a basic need for research of broader scope. And since teaching is derived from basic research, it too should become broader. It is a matter of recognizing increased global interdependence.

Thus, to recapitulate, the roots of the paradox lie in the emergence of a crisis of relevance of the social sciences to the needs of society. Given the historical, political, and economic development of the last 20 years, this discipline has been unable both to serve the polity and its priorities adequately, and also, it has become less and less able to develop in a sense that enables it to offer more wide

155- "Today, there are many more actors who influence research support, including provincial and federal prime-ministers, ministers and deputy-ministers, education officials, university administrators, funding council officers, institute and foundation directors, corporate and union executives, government managers, directors of national and regional associations and community organizations, and, of course the researchers themselves and their representatives at learned societies and federations..." Ibid page 21, "mainstream social science...", Ibid.; page 7.

ranging explanation, interpretations, and thus, solutions to problems of global, national, and even provincial perspectives within the scope of its own agenda.

In the second section of this chapter, we intend to demonstrate the actual influence of the increased dependence of this discipline on the resources distributed by the governments of Canada and Ontario as they struggle for the recognition they think they deserve. In essence, we will demonstrate how the social science community answers critiques of itself coming from those who believe that social science research does not deal adequately with issues that are politically and economically relevant.

2) "What Have Ye Done?"

In an attempt to overcome the lack of adequate funding and to convince both governments and the public of the importance of teaching and research in the social sciences, they have often been forced to submit to the dominant economic and political "measure" of success and relevance. For there is hardly an area of study that is more dependent on public funding than the social sciences and humanities:

Social Science researchers, more than other kinds of researchers, depend on public funds for the support of their research. Yet when that public asks of them, "What have ye done?", they are unable to produce a list of visible achievements and contributions. 156

Although, there seems to be a general agreement about the importance of social science knowledge, it is in the manner in which this knowledge is being researched, taught, distributed, and put to use in society that is put to the test when interveners ask of a concrete contribution by this discipline: 157

156- "Some of them even resent the very question, considering that their purpose is well enough served by criticizing the existing order of society. Others point out that their contribution are indeed valuable, but that only other social scientists with the same ideological bent or research paradigm are qualified to understand their answers." Science Council of Canada Proceedings, page 8.

157- "Among the issues requiring social science research are social adaptation to technological change, aboriginal rights, constitutional reforms, industrial relations, linguistic policies and ethnic relations, the labour market, labour productivity, women's rights, family disintegration, aging society, inflation and unemployment, youth

Like it or not, in the current climate of economic crisis and mounting unemployment, social scientists will have to learn to answer questions about their place in the priorities for public spending. They will have to interrogate themselves and clarify to their own satisfaction where they fit into the general scheme of things, they will also have to learn to communicate to others some sense of their existing or potential usefulness to society. If they fail to do so, public funds for social science research will be granted more and more reluctantly.158

This has particularly significant importance to higher education institutions for they have already suffered cuts in this area for lack of visibility, exposure, and credibility in the eyes of the public and of governments. This deterioration, we maintain, is also due to the application of the industrial/functional paradigm when determining the use and value of this discipline. We know what the governments priorities are, thus we know what is the measure of value.

This is the great paradox at work here. As the discipline attempts to justify itself politically, its purpose and goals are often antithetical, or at least rejects criteria to which it is subjected to in this process of evaluation. But this is crucial, for if it does not manage

unemployment, federalism, french-english relations, Canada's international role, criminology and law reform, economic and trade policy, economic ownership, poverty and the redistribution of wealth, cultural creativity, and nationalism vs regionalism...At the international level, social science research is needed on third world development, conflict resolution and disarmament, terrorism, trade barriers and international competition, hunger and inequality, population, energy and natural resources, and international relations." Proceedings, page 17.

158- Ibid.; page 8.

to do a good job at justification, it is destined to become even more starved for funds and, by that same token, even more disorganized and unable to answer to its own agenda.

As the next passage suggests, manifestations of this paradox are nothing new and have been omnipresent for a long time between this discipline and political and economic leaders. This is why the relationship between the power wielders and the intellectuals always seems to have been antagonistic:

...in post-war Canada there was at least an uneasy truce as academics, politicians, and business leaders agreed on the need to develop education, expand the university system, create research funding councils, and develop the social sciences. In recent years, there has been more recrimination than agreement, involving disputes over the objectives of and the means for developing social science research.¹⁵⁹

Government and business often claim that social science research in Canada and Ontario is too little concerned with national, provincial, or regional issues of economic and political importance, that this research does not provide the adequate means for treating problems and formulating

159- "Within Canada, social scientists make contributions as thinkers on modern philosophy and ethics, teachers, members of Royal commissions, government employees, researchers in institutes, political economists, policy analysts, social researchers, politicians, party workers, public administration experts, consultants, and public commentators. Yet despite the size and significance of the contributions of social science in Canada, despite the fact that most problems facing the country have important, if not crucial, social dimensions, and despite the considerable investments that were made to build up the social sciences in the 1960s, financial support for the SS has declined in absolute and relative terms since 1971." Ibid.; page 19.

solutions. They criticize the often out-of-date content and methodology as well as what they consider the shortcomings in basic data, knowledge, theory, and conceptualization.¹⁶⁰

For its part, the social science community points out that there are indeed weaknesses in the product of their discipline, but that there are economic reasons and political reasons for these shortcomings, and that these are mostly out of their hands. Economically, it underlines the lack of sufficient financial resources which renders it incapable of reflecting adequately the demands put on social scientists. It is impossible to sustain both fundamental and applied research in these conditions. This problem is even more acute considering that the social sciences in Canada are relatively young and need time to develop. So far the universities have carried the burden of that development, but it is obvious that they have become less and less able to do so.

Furthermore, it is also the relative immaturity and underdevelopment of the whole research infrastructure in Canada that must be taken into considerations. Even governments, businesses and other users are not aware of what research and policy advice is available; social science assistance is badly used, and empirical evidence and analyses often ignored for they are not always economically profitable and/or politically acceptable. "In other words, those who

160- Ibid.; page 18.

complain about social science research are often "killing the messenger" who bring news of their own failings. Critics should understand that social science research can only provide enlightenment, not solutions."¹⁶¹

The political and economic sensitivity of social science research and teaching is often what constitutes a major obstacle for the advancement of this discipline in society and at university. This discipline is unique in that it often criticizes the status quo, and rejects the limitations of a narrow minded industrial/functional approach as an evaluating and working paradigm. And given the fact that it is higher education institutions that are at the root of most social science research and teaching, universities are themselves caught within this wrenching paradox.

¹⁶¹- Ibid.; page 19.

3) The Balanced Approach and the Paradox

In his concluding remarks to the Conference "The Social Sciences: Stagnation or Regeneration", William E. Taylor Jr.¹⁶² summed up what basically constitutes the capitulation of a discipline in the face of the Canadian reality of the domination of the industrial/functional approach:

Like many of you, I puzzle over the scant credit-- and funding-- we get for social research. Remember the story in which Alexander asks Diogenes, "What can I do for you?" and the old man replies, "Get out of my light"? Even though scholars have always hoped politicians would get out of their light, they have also searched through history for patrons to buy the candles...

If we do not want to end up sharpening our own pencils, if we want to encourage better students, then we must understand these clients and cooperate with their legitimate goals too.¹⁶³

The consensus that seemed to have developed as a result of the conferences is one that recognizes the problems of lack of interdisciplinarity, lack of teaching and research from a global perspective, and the need for more knowledge concerning the rapid changes of the modern world; but, at the same time, recognizing that if it is to continue on the path of discovery it will have to become conscious of the political and economic expectations, of a short-term nature, of the present Ontario and Canadian government.

¹⁶²- Representative of the Social Sciences and Humanities Research Council.

¹⁶³- William E. Taylor Jr. Proceedings, page 235.

The social science community seems to have accepted the compromise, much like the other concerned groups that we have touch upon in our analysis in earlier chapters. Regardless of the paradoxical relationship between them and government, they must subject themselves to the forms of financial support that are provided; they will also have to become innovative as well in their attempts to legitimize their discipline, on top of being innovative for the array of social questions and issues.

This is quite the task, given the institutional problems that the social sciences and humanities are facing within the higher education institution, and given the direction in which the political agenda is moving.

It is by analyzing the concept of "effective social knowledge" that one can understand that a balanced-approach or compromise has been adopted by those concerned with the problems of the social sciences in Canada and North America. This concepts was best expressed by John E. Trent in this passage:

The essence is that effective social knowledge is both a problem-solving aid used by social institutions and a means of criticizing them. It is useful to decision-makers and to reformers, to institutions and to the public. It seeks not only to explain social problems but also to set them in their historical and structural context. The sum of social knowledge should be usable and should generate positive social benefits.¹⁶⁴

164- Trent in Proceedings, page 244.

Trent maintains as well that effective social knowledge should not be confused with popular social knowledge... "More often than not it will be unwelcome and uncomfortable. It may even be considered subversive and therefore opposed by those in authority. Social scientist may be seen as Bad News Bear".165

This compromised balanced approach is, for the purpose of our paper, purely representative of the paradox between the logic of the industrial/functional approach and that of the expansion of the body of social knowledge. Quoting Prewitt again:

To argue that an effective social science is one embedded, to a degree, in the priorities and purposes of the nation in which it is practiced does not imply that social science can speak only to the powerful interests in society... Social criticism takes aim at practices within the society from which the criticism emerges.166

As a result, the next concern is which force in the paradox that will dominate? And to which of those forces will higher education and their institutions be subjected to? We know that it is the industrial/functional needs that predominate in the paradox, and we know this from our analysis during and prior to this chapter. We know, too, that the debate, on the future of higher education and the role of the social sciences and humanities within higher education institutions, is more of a non-debate.

165- Kenneth Prewitt in Proceedings, page 245.

166- Prewitt in Proceedings, page 245.

It is then a question, of reenforcing the other force of the paradox, that is, the agenda of the social sciences and humanities, and establish a true debate on the polemical nature of social science knowledge and the dominant industrial/functional paradigms that permeate the status quo. It is, thus, within the analysis of the crisis of "relevance" and of the paradox that the weaknesses of the industrial/functional conceptual approach to the future of higher education can be understood as being critical:

At the very moment when social scientists are being asked to undertake new and dynamic responsibilities, to shift their horizons to include global problems, to develop new theory and methods, and to respond to rapidly increasing demands for applied, problem-oriented research, we are forced to acknowledge that all the recognizable trends point in exactly the opposite direction. International competition, both economic and political, is promoting an increase in demands for national relevance, and for technological development rather than for social research and advancement. In such conditions we can expect a narrowing of horizons rather than a broadening of scope.¹⁶⁷

167- UNESCO conferences, op cit.; page 9.

4) Beyond The Paradox

Regardless of the compromise or the balanced-approach, the social sciences by their very nature today offer alternative conceptions of knowledge, that may be considered when examining future of higher education. These alternative conceptual approaches are based on new theoretical and/or epistemological models which provide the source for an authentic debate on the future of higher education.

The industrial/functional approach has its own perspective on the use of knowledge in society. Though it is not concerned with philosophical and social implications of the use of knowledge, it is concerned with economy and efficiency. These are indeed very important aspects of our lives as individuals and as a collectivity. But not so important as to be the only determinants of the choices we make for the future. The industrial/functional paradigm has more or less sought to raise economic concerns over and above considerations of a broader nature, as well as preventing us from learning alternative world views. It is a dangerous and critical moment now that we know what control over the allocation of resources by governments has done to the debate on the future of post-secondary education. It is restricting the relationship between knowledge and action:

The creation of useful social knowledge is impeded ... by the widely held view that there is a single correct conclusion to be drawn from any social inquiry, and that this conclusion is unaffected by the ebb and flow of interests surrounding a

particular social phenomenon. This view obscures the essentially value-based nature of the explanations of social science.168

This chapter has attempted to present an analysis of the present perceived crisis of relevance in the social sciences and humanities in Canada and Ontario; this is considered as important in that already some of the basic weakness of the industrial/functional conceptual approach to the future of higher education can be traced back to the paradox, and in that the social sciences and humanities, offers, as a result of its essence and nature, alternative explanations of the crisis in post-secondary education as well a new and very important perspective to an otherwise very unidimensional debate.

168- Maurice Godelier in Proceedings, page 251. Taken from "Les Sciences de l'homme et de la société en France: Analyse et Proposition pour une politique nouvelle" La Documentation Française (Paris: Ministère de la recherche et de l'industrie, 1982).

CHAPTER 6: THE SERVICE UNIVERSITY

It is contended, by the authors of The University Means Business, Janice Newson and Howard Buchbinder, that there has taken place a major change in the vision of the higher education institution, the university. According to their analysis, the change of vision is the result of very fundamental transformations that occurred in the 1970s, both in the structural organization of the university and in the social, political, and economic context of this period. The fascinating aspect of this analysis, for the purpose of our study on the crisis of higher education, is that through a different explanatory process, or paradigm (other than the paradigm of relevance) they come to a conclusion where the industrial/functional approach or vision of higher education is the centre of the problematic. In their approach, the vision of the university has been transformed to one where higher education performs a service; thus the concept of the "Service University".

The link between our analysis so far and that which is reflected in this newly released publication is self-evident. Their conclusions are similar. Nevertheless, it is our intent to illustrate and synthesize their thought for they do contribute to a new perspective to understanding the crisis in post-secondary education. The emphasis is on the university, as the institution of higher education, and the

external and internal transformations through the 1970s and 1980s on the universities in Ontario. It reveals the impact of the new dynamics on these institutions in a period where higher education has become a public and/or a social domain. Some of the explanations are also very similar to the analysis found in chapter 4; however, the perspective adopted by the authors of this newly released publication is very different.

In short, since the beginning of the 1960s and up to very recently, there has been, historically, two phases: expansion and contraction. The first phase was characterized predominantly by the liberal vision of education, coexisting with differing and alternative visions that could, given expansion, be "papered over" because of the general availability of resources. The expansion period, where the size and number of universities grew, also witnessed the emergence of two fundamental structural and functional influences: the growth of university administrations, and; the emergence of the right to collective bargaining and union representation.

In the second phase, generally referred to as the contraction period and characterized by diminishing funds, there occurred fundamental changes to what the authors term the "Academic Work Process". Thus, the analysis integrates external and internal factors to their explanation of both historical phases that the university institution has

undergone. The major result of these changes has been the emergence of increasing links between the university community and the private sector. Along with this integration, there developed a new vision of university; a new vision replacing the old liberal version and gaining impetus in term of political support from all sectors of the higher education community. The purpose of their new book The University Means Business is essentially the same as ours, for it is an attempt at illustrating the fundamental forces which, in practice and in theory, are shaping the future of higher education. As well, it is an attempt at furthering a more enlightened discussion and the development of a new consensus.

Many of the points that will be made may have already been discussed; however, it is interesting to proceed with a synthesis because the conceptual organization is different. The problems while being the same, are seen in a different light, through a different perspective, outside the paradigm of relevance. Our synthesis can analytically be separated in two: the first dominant theme is the historical development of the "crisis"; second, is the emergence of the dominant vision of the university as a "service":

on many university campuses, events are proceeding as though they need not be answered and perhaps should not even be asked. The political rhetoric that place the university in the centre of economic recovery and technological progress appears a welcome change from the doldrums of the 1970s when cutbacks were accompanied by questions about the usefulness of higher education. In place of self-

doubt, confused purpose, and declining morale, rebuilding self-respect through service to the institutions that makes the economy run sounds seductive and compelling...The marriage between ivory tower and marketplace is celebrated in university annual reports and in the advertising campaigns of multinational companies. 169

169- Janice Newson and Howard Buchbinder, The University Means Business (Toronto: Garamond Press, 1988), page 8.

1) Historical Conditions for a New Vision

Newson and Buchbinder argue that despite some fundamental differences in the objectives of higher education and university, there existed a strong consensus as to the benefits, tangible or intangible, of post-secondary education to society. As a result of strong consensus and political will, new universities opened, while older ones grew in size; all developed within the establishment of a post-secondary system more accessible than ever before. As a corollary to this growth emerged new buffer bodies to "keep governments at arms length to maintain relative autonomy for the system".¹⁷⁰ As well emerged new organization "to represent the interests of academics, both in academic decision-making and in relation to other political and economic issues that bore on their professional status".¹⁷¹

But already, as the expansion period was in full gear, appeared signals of a period of retrenchment:

The prevailing approach to government spending was based on keynesian economics, and the liberal vision guiding higher education policy was consistent with the keynesian formula of demand management. By the late 1960s, rising inflation and declining productivity signalled the beginning of an economic crisis in Canada. The ensuing contraction pressured governments to curtail social spending in favour of catering to corporate needs. This shift of emphasis was justified by replacing keynesian-inspired social policies with neo-conservative, supply-side analyses and policies.

170- Ibid.; page 13.

171- Ibid.

One result was withdrawal of some funds from the university sector.

Nevertheless, one of the major changes that occurred within the university is the expansion in size and activities of the administration. As a result of expansion, division of labour and/or functions came to prevail. Modern managerial practices invaded the university coming into direct conflict with older collegial systems of decision-making:

The positions of Deans and Principals have been affected in two directions by differentiation. They are considered part of management insofar as they allocate funds within faculties and programmes. Yet they no longer determine the academic direction of the university, since they occupy a position below senior management... To the average faculty member, deans are increasingly seen as managers and less as academic leaders. They are seen as representing not the will of the collegium but the decisions of management... University presidents are increasingly described as "chief executive officers", who, like their business counterparts, are encouraged to seize the initiative-- all too often leading their own university down the path of cooperation with the corporate sector...

Another major internal change has been the development of collective bargaining units which sought to represent teachers in their professions in negotiations with the administration. This practice in itself coming into conflict with former collegial means of managing institution-scholar relationships. Although relations between faculty and administration "could stay collegial in the senate... they became adversative in the bargaining process":

Consequently, just when fiscal contraction forced upon the university community significant struggle

over priorities, university politics became more complex and conflictual.¹⁷²

Furthermore, in Ontario, the authors argue that the "buffer body", the Ontario Council on University Affairs became an instrument for promoting "system differentiation and rationalization...These new actions by the OCUA removed from individual universities control over curriculum development".¹⁷³

Most important, conceptually, for the authors is to recognize that it was a combination of events that has lead to the development of a new vision. These events are both external and internal to the universities:

As with the expansion period, these features of contraction cannot be accounted for simply in terms of underfunding. Certainly, the fiscal crisis forced issues to the surface. As well, the lack of money limited the range of solutions. Nonetheless, the changes are related to broader social, political and economic patterns and to the choices made by governments and universities in response to these patterns. They sit alongside other characteristic features of the 1970s in Canada: rising unemployment, confrontation between union and management, plant lay-offs, an ideological shift from liberalism to conservatism, and questioning of public funding of universal social programmes.¹⁷⁴

But, these factors, internal or external, do not suffice in explaining the crisis of higher education. The crisis, according the Newson and Buchbinder, has to do with the

172- Ibid.; page 18.

173- Ibid.; page 19.

174- Ibid.; page 20.

impact of the changes on the "Academic Work Process"; this is where the authors differ from traditional interpretations, it goes into how the university has been fulfilling its role as centres of higher education, and how this has been tampered with as a result of new circumstances. The changes in academic work process have the potential for "fundamentally transforming the nature of the university".175

They define academic work as the work undertaken in universities by academics which consists of three major components" teaching, research, and service.

Newson and Buchbinder argue that the ascendancy of administrations and the growth of collective bargaining units have lead to three major processes that have influenced the nature of academic work: diversification of work force, separation of functions, and the attack on tenure.176

In the first instance, through diversification of the work force, separate categories of academic workers have been created "each having distinct terms and conditions of employment". These vary from tenure track, to limited contracts, to part-time academics. This emerged in order to facilitate flexibility which "is associated as much with developing a new agenda for universities as with responding to funding shortages".177

175- Ibid.; page 23.

176- Ibid.; page 25.

177- Ibid.; page 26.

In the second instance, the separation of teaching, research, and service "fragments the role of the university professor into its constituent parts. Each part can be organized as a distinct, specialized task and assigned a different value."¹⁷⁸ In the past, the authors argue, service activities enabled the academic staff to "exercise collegial control in the governing structures of universities".¹⁷⁹ Now academic management has replaced shared collegial responsibility.

Finally, in the last instance, the attack on tenure is the consequence of the diversification of academic work. It is the consequence of stronger university administrations that seek greater control over the academic mission of a university where academics' voices become "increasingly peripheral in decisions that affect the directions of the university".¹⁸⁰

Consequently there emerged conflictual relationships in the university between the collective bargaining units and university management where "they are struggling over the re-organization of academic work".¹⁸¹ Newson and Buchbinder are convinced that this struggle over the academic work process shapes the way universities function as social institutions.

178- Ibid.; page 27.

179- Ibid.; page 27.

180- Ibid.; page 29.

181- Ibid.; page 35.

Thus the crisis of universities is the struggle over the academic work process. A struggle in which the dominant segments/interests of society are involved determine to ensure that universities become relevant to the socio-economic needs of the province.

2) The New Vision of University

Whatever the interpretation of the crisis, the authors agree that since 1980, when contraction and all its ramifications began to take their toll on universities, there has emerged a new willingness to rethink the link between universities and society:

Perceptions of the nature of this ongoing crisis and diagnoses of its causes have varied widely. (We are not striving here to define the crisis in a particular way. We are arguing that a sense of crisis entered discussion of higher education policy during the contraction period and that this sense of crisis produced varying definitions and proposals.) Nonetheless, the sense of crisis has provoked serious thought. How can the crisis be resolved? How can the universities gain its stability and purpose?¹⁸²

Newson and Buchbinder understand vision in their relation to changes taking place in universities and how particular interest use them to shape social conditions:

the vision is both the blue-print and the effects of using the blue-print; visions are shaped by political and economic forces in their formulations and in the ways they are implemented in concrete social institutions.¹⁸³

Visions seen in this sense play a mobilizing role in society, they contribute to the process of change in universities. They help shape debate over university policy..."In this sense, the struggle to control the academic work

¹⁸²- Ibid.; page 54.

¹⁸³- Ibid.; page 55.

process...can be seen as a struggle to implement different visions of the university".184 They provide the basis for justifying the use of resources in the service of their related objectives..."through appeals to a particular vision of the university, public monies can be diverted to support some institutions of higher learning more than others, or some programmes more than others, or some students more than others".185 Visions also lead to the creation of committees, agencies, offices, positions, and organizational structures..."visions have real sponsors who have specific institutional, socio-political, and economic locations. They can be used by various people and groups to justify patterns of change already underway and, therefore, can help to build the capacity to carry them further".186

According to the authors, there has developed three dominant visions of the university, these visions are direct responses to the crisis of higher education and seek to resolve this crisis. These are: 1) the university as a haven for scholars, 2) the university as a tool for economic growth, 3) the university as a social transformer:

Each provides its own analysis of the crisis that has affected universities during this period. Each also proposes its own solution, based on a vision that prescribes the role of the university and its relationship to society as a whole. Although they

184- Ibid.; page 56.

185- Ibid.

186- Ibid.

differ in these regards, the views converge on the political and economic pressures bearing on universities to assist in the economic transition to a high-tech society. The visions they put forward relate in different ways to these pressures.187

Interestingly though, the authors conclude that the vision of the university as an academic haven and as a tool for economic growth predominate over that of the university as a social transformer. That is precisely the point we have attempted to make from the beginning of this whole paper. They argue that there are two reasons for this. First is, that in different ways each one "supports changes in the university that are compatible with external political and economic pressures". Second is, that each "posits a (different) model of the university compatible with the patterns of change already under way, such as changes in the academic work process".188

Neither the academic haven or the university as economic tool has attracted sufficient support to generate the kind of public consensus attached to the liberal vision. However, a new term coined by the Science Council of Canada -- the "service university"-- brings together the central thrusts of these two visions of university; promoter and guardian of academic achievement at the highest level and instruments of high-tech corporate development. The idea of the "service university" is deceptively compelling, it implies that the university exists to serve the needs of society as a whole. Proponents may see it as the basis for forging a broad consensus on the direction for university development in the 1980s and beyond.189

187- Ibid.; page 64.

188- Ibid.; page 65.

189- Ibid.; page 66. 166

3) The Service University

The assumption is that a new agenda "is emerging out of the perception that the transition towards a high-tech society requires significant economic and technological adjustments". The conditions in university seem ripe for attacking this new agenda..."Dismantling of the liberal vision has created space for a substitute blue-print for university development".¹⁹⁰ The argument is that governments in the 1980s have begun to articulate new priorities for higher education, and that developments at universities have facilitated changes to fulfill those.

In discussing the concept of the service university, Newson and Buchbinder provide criticisms of the new policy orientation. It is not surprising that their critique centers on the contradictions; that is, on the paradoxical objectives of higher education when superimposed upon those of the economy. A particular emphasis is put on the fact that the changes have been felt more as a result of corporations' actions than those of governments. Although each play an important role.

According to the authors, and their opinions corroborate the analysis provided in chapter 1, the establishment of new priorities began with the submission of the Fisher Report,

190- Ibid.; page 68.

from which the ensuing Bovey Commission was created. Betty Stephenson expressed the outline of the new vision:

Basing her proposals on anticipated manpower needs and changes in the labour process required by the scientific-technical revolution, she called for a restructured university system oriented, on the one hand, towards skill training and, on the other, towards elite education. This was to be accomplished via the three-tiered system proposed in the Fisher Report. Presumably, manpower forecasting would determine educational objectives. University-corporate co-operation was essential to realizing this agenda.

Under this new arrangement, links between the higher education sector and the corporate world were justified on the basis of need for new workers in high-tech, computer-based production, etc. Their critique of manpower supply is based on the fact that many dispute the idea that more skilled workers will be needed in the future in the context of present economic developments. But most important is that this (industrial/functional) approach fails to address the most critical need of all:

a capacity for evaluation and criticism in a society that will function largely through electronically generated information systems. 191

Furthermore, integration of the university "into high-tech forces of production will ultimately diminish its autonomy and its potential for creative, critical assertiveness".¹⁹² To the authors, this is a central issue because of its impact on the long-term relationship between university and

191- Ibid.; page 71.

192- Ibid.

society..."the new vision of the university makes this role explicit for a segment of the academic work-force, which increasingly is commodifying its relationship with capital".193 Teaching becomes the lesser priority..."university objectives become skewed towards saleable applications...Ironically the more useful the university becomes, the more limited its options".194

Partnership for Growth refers to barriers to university-business co-operation and collaboration as cultural differences, related to the process of academic work itself: self-paced work, discretion over organization and management of research, and rules and understandings concerning freedom of communication and publication. Business emphasizes profit and commercialization, deadlines, proprietary rights, and competitive edge in the market place. Partnership for Growth suggests that barriers can be overcome by greater understanding between partners achieved through key individuals and well-defined agreements. Which institutional practices will be changed and in which direction...Cultural differences and partnership obscure the fact that the academic community would be forced to abandon principles and procedures long thought to be the heart of academe.195

For Newson and Buchbinder, the vision of the service university "builds relations to industry into its mission".196 As a result, universities are encouraged into this "unidirectional" focus where service to society is

193- Ibid.

194- Ibid.; page 74.

195- Partnership For Growth is a publication of the Corporate-Higher Education Forum. Ibid.; page 76.

196- Ibid. 82.

equated with service to industry. These relations are reinforced by the establishment of "third party bodies" which have a considerable impact on universities because they control research grant policies and public funds, shaping the overall funding policy of the government and although..."increases to university operating grants are not keeping pace with inflation or with the demand of students for access, government monies in many Canadian provinces are being funnelled into projects that link university teaching and research with corporate-sector needs".¹⁹⁷ All the while university management is becoming more efficient and effective in applying this vision and establishing the links. In concluding, the authors resume:

Universities were made vulnerable to this new corporate agenda in the years of contraction following expansion. To accommodate budgetary shortfalls, academic work was reorganized in ways that now facilitates implementation of the service university model. Changes in administrative structures and the shift of control to full-time managers to deal with the fiscal crisis are being consolidated in order to develop relations with corporate clients and to exercise strong leadership in the new "indus-versity" marketplace. Demoralized by more than a decade of underfunding and its impact on quality, members of the university community are welcoming the new sources of funding and the renewed value being placed on their work in exchange for applying their energy and talents to the needs of the corporate sector.¹⁹⁸

197- Ibid.; page 84.

198- Ibid.; page 93.

Thus, Newson and Buchbinder have presented an analysis which we consider both as complementary and as corroborating on many of the points that have been made concerning the conceptualization of the crisis in post-secondary education and the approaches to the future of higher education. In both cases, it is agreed that this vision of the "service university" or the industrial/functional approach is unsatisfactory, and is based on false premises concerning the authentic needs of the people. The contradiction between the nature and role of higher education institutions in their essence and the economic vision that predominates are obvious. They are not obvious in terms of the existence of a polemical dialogue between two options, but rather because many have attempted to underline the fundamental difference between the essence of each, education and economy. Many interpretations of the paradox emerge, none of them satisfactory in themselves, but concrete enough to be reflected in the dialogue.

Nonetheless, one view or vision or approach predominates and is being implemented without a true debate in the public realm. Expediency has characterized this approach, and this has left many an intervenor stranded in his criticism of one aspect, underfunding.

CONCLUSION: A CRITIQUE OF THE INDUSTRIAL/FUNCTIONAL PARADIGM

The purpose of this paper has been two-fold. First, we have attempted to establish what is meant by the "paradigm of relevance" and the "industrial/functional approach" and how these conceptual tools apply in the discourse of many who play a part, directly or indirectly, on the policy-making process in higher education and on the type of debate that precedes the application of new policies and initiatives. We have dealt with the influence of these conceptual tools mostly on governments, but we have dealt also with the private sector. Essentially, the dialogue and rhetoric is not limited to one sphere, either public or private.

Secondly, it has been our attempt to demonstrate the somewhat contradictory elements of this dialogue. It has been made evident that there is somewhat of a dissonance in the vocabulary of many, especially those who seem to have a better or more insightful idea of the essence and nature of higher education. As many people struggle with the idea of the presence of the societal impasse, a crisis of society, these same people justify higher education as an integrative element of this society. It has been shown that despite the existence of a paradox, it is nevertheless the industrial/functional paradigm that has dominated. Thus the emergence of a so-called "balanced-approach".

These points having been well-documented and discussed in our development, it will be the purpose of this final and concluding chapter to delve into the reasons for such a paradox, as well as the danger of the industrial/functional paradigm especially when applied to higher education. This conclusion should serve more as food for thought, because the real intent is to open the door for more dialogue, a dialogue that would deal with the very essence and profoundness of the crisis of higher education. As Stafford Beer, an internationally renowned consultant in operational research and cybernetics, put it, it is a matter of using "metalanguage" to the crisis. As a keynote speaker to a Couchiching Conference on the future of work, he asked:

How can we create a new language and a new paradigm? Only by lifting our eyes above the horizons that we ourselves have imposed on thought and action alike. I speak of a new paradigm to be discussed in a language over and beyond the existing language. It's name in Greek is meta, meaning over and beyond. Therefore I suggest to you that every deadlocked issue that we necessarily discuss should be re-evaluated in the context of a whole and larger system. In the language of their posing, systemic problems cannot be solved. It is in the metalanguage alone that it is clever to dissolve them.¹⁹⁹

In light of this advice, there are two authors, in which we are particularly interested, that seem to offer us and deal with the issue in metalanguage. These authors offer an approach which is radical, in the sense that it seeks to go

¹⁹⁹- Stafford Beer "The Future of Work" The Couchiching Conference TV Ontario transcripts August 1986.

to the root of the problem of higher education. They are Andre Vachet (professor of Political Science at the University of Ottawa) and Herbert Marcuse, a well known radical philosopher-thinker of the 20th Century. In fact, the two provide the same critique of the modern industrial society, and although the main contribution is by Marcuse, Vachet has provided further insight of Marcuse's explanation of the crisis of society as it applies to the university.²⁰⁰

The main argument is that the "paradigm of relevance" and the "industrial/functional approach" (we will refer to those two as the industrial/functional paradigm) are a constituent part and product of a bigger crisis, the crisis of society. This paradigm contains and reflects the contradictions in society and in thought of modern industrial civilization. It is a preposterous and reductionist tendency to deal with the crisis of post-secondary education as a crisis of university alone. The crisis of higher education implies the crisis in the use of knowledge, its role and application for the whole of society's development and progress.

200- The two documents which are the source for this critique are a Vachet dissertation presented in the framework of his receiving the Professor of the Year Award in 1983; it is entitled "Crise de Civilisation et Université: Enseigner Aujourd'hui". The second is Andre Vachet's synthesis of all of Marcuse's work in Marcuse: La Révolution Radicale et le Nouveau Socialisme.

But what is meant by the crisis of society? There are many interpretations of such a crisis. Many believe that it has to do with the incapacity or inefficiency of the productive system. Others, like Marcuse and Vachet believe that the crisis is much more all-encompassing..."Si nous croyons que l'universite est en crise, c'est que toute la societe derive, que la civilisation qui l'informe eclate, perd sa coherence et cesse d'etre synthetique...L'universite comme microcosme reproduit alors ce mouvement globale".201

The main element of the crisis of society has to do with the fact that the dynamics which enable the individual to develop as an autonomous entity even within the limits of space and time and scarcity are stalled. That is, the thought process or social thought as it is widely understood and conceptualized does not provide for the possibility of going beyond the present state of affairs; in fact, social thought has come to play an integrating role for the established order rather than a liberating one. The main victim is the person who, faced with the increasing power of integration of the economic and political system, is not in charge anymore. The simple premise is that the individual is repressed and that social thought does not provide the tools for his liberation.

201- Andre Vachet, Crise de Civilisation et Universite: Enseigner Aujourd'hui (Ottawa: Edition de l'Universite d'Ottawa, 1984), page 9.

Now, this repression manifest itself today in varied and subtle ways; the force of Marcusean analysis is the unravelling of the subtleties of oppression. In light of this idea of oppression, it is an interesting and most fundamental aspect to notice, in the paradoxically balanced-approaches of some of the literature discussed in our paper, the recognition of the subversive and liberating power of education and knowledge. It is this subversive and liberating power of higher education which seem to be confronted with the integrative power of education; this polemic is reflected in many an interveners thoughts.

From this point we shall provide a "synthesis of the synthesis"; that is, we will attempt to resume Marcuse's thoughts on the crisis of society as they have been resumed themselves by Vachet. It is hoped that this synthesis will provide an accurate description of his thought; but let us note, that it is certainly an incomplete account of it.

For Marcuse, there has developed an oppressive culture and civilisation; the modern industrialized system has stifled the freedom and the possibility of autonomy of the individual. Freedom he defines as the possibility for free interplay of men's pulsions and instincts where instincts are polymorphous and infinitely varied and not predetermined

in their intentions.²⁰² Any organization of instinct and satisfaction implies limitations to freedom and happiness..."Ce qui, à la limite, aboutit à l'esclavage qui fait exister l'instinct, le besoin, la satisfaction comme instrument et comme chose, car c'est la forme pure de la servitude: exister comme instrument comme chose".²⁰³

Thus, Marcuse's fundamental critique of modern industrialized society is that the forms of oppression are so developed that needs and satisfaction are reduced to instruments. The consequences are alienation and stagnation. But Marcuse is careful to note that there are natural limitations to freedom, these imply the application of reality to that of pleasure understood in the freudian sense..."Le principe de réalité permet au principe de plaisir de s'adapter à un conditionnement concret et à une réalité limite pour en tirer un maximum possible de satisfaction".²⁰⁴ As such, In reality freedom is confronted with the struggle

202- "Or c'est cette indétermination de l'instinct, fondée sur l'infinie polyvalence de la satisfaction, qui constitue pour Marcuse la notion première de liberté". Vachet, Marcuse... page 25.

203- Ibid.; page 26.

204- "Les instincts, pour se préserver et se réaliser doivent donc limiter leur fins et se subordonner à un principe d'organisation. Ce principe de réalité est la condition et l'élément constitutif de la civilisation...la substitution du principe de réalité au principe de plaisir marque l'impossibilité d'une liberté totale..." Vachet, Marcuse... , page 27.

against scarcity, which is the basis for organization in civilisation.

This struggle against scarcity, according to Marcuse, is the origin of the repressive culture, for it has, throughout human development, taken over the will for freedom. It is the search for an efficient system of and for freedom that comes to contradict or antagonize the search for freedom in itself..."l'aspiration à l'efficacité se traduit en termes de rationalité, de prévision, de planification, de productivité, de croissance, de progrès, etc... Elle entraîne une éthique qui privilégie l'universel, et qui fonde la ligne de la loi et son corollaire l'identité, qui, sous des formes diverses, servent de mesure à toute société juste depuis l'antiquité grecque".²⁰⁵ Thus in presenting itself as a precondition of freedom, the principle of reality, efficiency against scarcity, takes precedence over the principle of pleasure, of unmitigated freedom.

Social efficiency as dictated by the principle of reality requires order and continuity, the problem being that order and continuity have become more important than freedom in itself..."à l'instant même où le progrès, grâce à la transformation répressive des instincts, devient ainsi automatique, il se dépasse soi-même et se nie. Il interdit la jouissance de ses propres produits, et c'est justement cette interdiction qui permet d'accroître encore la

205- Vachet, Crise de Civilisation..., page 26.

productivité et, par la, le progrès".²⁰⁶ It is a vicious circle where the increasing productivity of mankind and his work is linked to increasing repression, the latter in turn contributes to increased productivity. All this while the problem of scarcity has been conquered and the possibility of liberation increased.

To the repression imposed by the struggle of scarcity is added "sur-repression" which is determined by the specific social organization and by the tendency of institutions to survive and perpetuate themselves..."Ainsi la sur-répression peut se définir comme le résultat des restrictions rendues nécessaires par la domination sociale, qui cherche à se perpétuer artificiellement et politiquement dans des formes qui ne sont plus commandées immédiatement par la lutte contre la pénurie et la recherche de la satisfaction...La sur-répression c'est en somme la domination gagnant son autonomie et devenant sa propre fin".²⁰⁷ For Marcuse, sur-repression in modern industrialized societies takes on the form of "performance" or "efficiency" which come to determine the present organization of scarcity and the distribution of social relationships..."Ce principe est le moteur d'une société stratifiée d'après le rendement économique compétitif de ses membres, d'une société orientée vers le gain et la

206- Vachet, Marcuse..., page 28.

207- Ibid.; page 30.

concurrence".208 The fundamental point being that progress, which characterizes industrial society, does not imply the satisfaction and the accomplishment of the self as an end in itself, and as the highest values. Marcuse proceeds with the application of Freud's Oedipus complex to the idea of the interiorization of repression, which serves as a reenforcement of his point on the domination of the principle of reality over that of freedom and pleasure..."L'individu tout entier est enfermé dans sa propre répression de sorte qu'il ne l'éprouve plus comme contrainte".209

It is paradoxical that the possibility of freedom that comes with new technologies is not achieved in modern society. A gap is created, rather, between the possibility of freedom and actual freedom, a gap so wide that the possibility of freedom becomes repressive in itself for it becomes an agent of the re-enforcement of the productive process.

Furthermore, it is extremely important to recognize that for Marcuse the freudian principle of interiorization of

208- "Les exigences du rendement et de la croissance s'ajoutent aux exigences fondamentales de la recherche du plaisir ou, mieux, les remplacent pour se constituer en un ensemble autonomes de règles, de lois, de prescriptions et de défenses qui soumettent les individus et ruinent leur liberté." Vachet, Marcuse..., page 30.

209- L'interprétation de Marcuse précise que les éléments répressifs de la civilisation s'intègrent à l'ensemble psychique de l'individu qui les accepte non seulement comme inéluctables, mais aussi nécessaires, utiles et bienfaisants"; Vachet, Marcuse..., page 32.

repression is fundamental; it is the process whereby individuals' psyche becomes so engrossed with the efficiency of the productive system that it becomes a dominant feature of their actions, their motivations. This forces the integration of the individual with the social whole and its justifications. Paradoxically, any revolt against domination seems to imply the destruction of the individual who is integrated, so that the power of conservation which is at the source the motivating force of freedom becomes the tool for the protection and perpetuation of repression:

La rupture de la limite entre l'intériorité et l'extériorité produit l'éclatement de la limite entre le privé et le social, entre le social et le politique. Il en résulte l'abolition technologique du privé et du social au profit du politique (soumission à un pouvoir extérieur intériorisé) entendu comme la création artificielle d'une domination objective qui implique une répression totale ou plutôt une suppression de l'individualité.210

In effect, Marcuse refers to the creation of the unidimensional man where the diversity of instincts and pulsions become strapped by the logic of the productive system and where there exist no more contradiction between the end of freedom and the end of the struggle against scarcity, efficiency. The inability to go beyond the contradiction, as efficiency subverts freedom, is the source of the crisis in society; a crisis which is reflected in the ideological "blocage" of social thought and in the dangers

210- Ibid.; page 35.

that now face the earth as a physical entity.

...comme toute contradiction qui n'est pas dépassée, elle ne peut qu'amener le blocage de la pensée et la paralysie de la vie. Sans un sous qualitatif la théorie ne peut que dégénérer dans la répétition, tandis que la pratique privilégie l'un des éléments de l'antimonie jusqu'à nier concrètement l'autre. C'est qui expliquerait l'absence de nouveauté et la répétition dans la pensée sociale et politique depuis plus d'un siècle. Et aussi, le peu d'innovation dans les systèmes sociaux, dont les structures fondamentales sont celles qui ont été imaginés ou improvisées au XVIII siècle ou au début du XIX siècle et dont la motricité suppose un choix réel entre la liberté et l'efficacité, et non pas leur réconciliation, qui demeure tout au plus dans le seul discours idéologique.211

This is what characterizes our society according to Vachet: the unachieved synthesis of freedom and efficiency, pursued equally as ideals, but unequally realized in global practice..."Or l'université, en tant que produit et reflet de la société à laquelle elle est accordée, ne peut qu'en être marquée."212

Furthermore, Marcuse upheld that the process of universalization and uniformization which characterizes modern industrial society; reflects a sort of de-individualization of the self, at least in the capacity for affirmation and resistance..."L'individu perd, au profit de la totalité sociale, son pouvoir d'affirmation et son

211- Vachet, Crise de Civilisation..., page 31.

212- Ibid.; page 32.

dynamisme d'organisation de sa vie et la responsabilité de cette organisation".²¹³ The individual thus becomes the object of administration where it is the functioning of the whole machine or system which determines his place.

It has been stated earlier that the industrial/functional paradigm was a product of the crisis. Not only is it a product, it also has become an instrument of perpetuation and reenforcement of the present state of affairs; a state of affairs which is characterized by repression according to Marcuse. Indeed, higher education, at least the popular perception of it as it has developed in Ontario and Canada, seem to fulfill those needs of the system by seeking to render more efficient the productive forces; to become more competitive internationally.

Thus higher education has a function in the operational sense of the word. That is, its liberating qualities are subjected to the exigencies of reality. Marcuse proceeded to explain how functionalism and operationalism have come to dominate our culture and our rationality in order to perpetuate the established system. Let us note that this is not a natural or an inevitable process, but is rather the result of the takeover, by the dominant interests, of the tools for integration. Our critique of the industrial/functional paradigm as applied to the higher education domain is integral to this discussion.

²¹³- Vachet, Marcuse... , page 40.

As was mentioned before, the struggle against scarcity, the principle of reality, requires an organization of some kind based on the possibility of order and perpetuation. Thus, the system seeks to establish permanence and uses all the elements of society as political instruments which guarantee coherence of the parts and its invulnerability against any possible metamorphosis. As well, if domination and alienation is at the center of the technological economy, then this must be reflected in its culture and in its rationality. As a result:

En effet, rien d'autre que le fonctionnalisme généralisée de la société technocratique ne rend mieux compte de l'aliénation, de la perte de conscience et de l'emprisonnement de l'homme moderne dans la généralités d'un tout artificiel et autonome qui lui impose les modes mêmes de sa satisfaction et de sa réalisation.214

Thus functionalism is the extension of the automatism of the economic and social system, it appears as the expression of the principle of performance. Indeed, the struggle against scarcity requires a strategy that brings about the division of labour. The division of labour has for principle its function, and its end is efficiency.

As a result, the people become the pieces dependant upon the system's global dynamic; their importance is calculated by the importance of their function in the productive and

214- Vachet, Marcuse... , page 43.

competitive system. Work reproduces not so much the individual, but the whole..."Mais ce qui est plus déterminant, c'est que, en s'intégrant par la division à un système global de production, il cesse d'être créateur...sa créativité assumée par le tout pour ses propres fins, se réduit et se perd".215

The division of labour in modern technocratic society has for essence and dynamic the function of its parts determined by the utility to the whole. Functionalist reduction translates into the repression of the individual in the name of efficiency:

nous pouvons relever deux voies principales par lesquelles l'idée d'efficacité pénètre l'Université: d'abord l'introduction de mesures de productivité; et la tendance à redéfinir les fins de l'Université en fonction de la primauté implicite de l'utilité et de l'utilisation de la connaissance et de la préparation au marché du travail...En effet, le développement quantitatif de l'Université, son organisation, ses ressources et ses méthodes de financement ont imposé de plus en plus de critères mécaniques et quantitatifs d'efficacité, qui en viennent à dominer la gestion de l'ensemble académique.216

Thus, the functionalist reduction, supported by the principles of performance, efficiency, and productivity, is not limited to the socio-economic sphere. It is also present as it invades "culture" and "reason", which is the realm of logic, philosophy, science, etc... Functionalism produces a

215- Ibid.; page 44.

216- Vachet, Crise de Civilisation..., page 33.

particular kind of positivism which spreads to all aspects of rationality..."Il s'en dégage une ontologie de la fonction comme essence des êtres et une éthique de l'opération comme leur valeur. Le rendement et l'utilité deviennent même déclaratoires de la vérité à l'exclusion de tout autres critères".217

Marcuse proceeds with a development of the concept of reason and how this has affected social thought today. This is important, in the context of our critique of the industrial/functional paradigm, because we will see how the emergence of a particular kind of rationality has influenced interpretation that have been provided concerning the crisis of post-secondary education and the approaches to the future of higher education.

Marcuse argues that in ancient philosophy, truth referred to the totality of being, as opposed to its temporal and behaviour manifestations. Thus, truth is the overcoming of appearances and partialities of being. Truth is the universal from which all existence is judged as partial and limited in relation to it. As a result, existence, by being partial, is the negation of the whole. It follows, then, that reality is a combination of both "what is" and "what could be". Reality goes beyond existence, it is also "what is" and "what is not"; thus the concept of negative reasoning..."La réalité est le résultat constamment renouvelé

217- Vachet, Marcuse... , page 45.

du processus de l'existence -- processus conscient ou inconscient, au cour duquel "ce qui est" devient "autre que soi".218

In this context, reason becomes defiance of the factual. Truth is subversive, rejects facts, but it is also creative for it contains the motivation for changing appearances and tendering to the universal..."l'épistomologie est éthique par elle-même et l'éthique est épistomologie". Ethics and epistemology are political for they exercise power over existence.219

As a result, all knowledge must be critical and political. Truth seeks the transformation of thought and existence. Reason and revolution converge. It is no wonder that Paul Axelrod in Scholars and Dollars concluded that..."although universities proved to be imperfect instruments of economic development, the very efforts they devoted to this function badly compromised their vital role as islands of culture and critical thought in a materialistic society. At no time was this more evident than in the economic recession of the 1970s".220

It is probably the subversive character of knowledge and reason that lead many an intervenor into the contradictory

218- Vachet, Marcuse... , page 45.

219- Ibid.; page 45.

220- Paul Axelrod, Scholars and Dollars: Politics, Economics, and the Universities of Ontario 1945-1980 (Toronto: University of Toronto Press, 1982), page 6.

and paradoxical path of the balanced-approach. Seen in this light, the movement of thought has a political content, and should be used to overcome the contradictions between the individual and the polity; that is, synthesize the requirements of the principle of pleasure (freedom) and the principle of reality (efficiency), rather than integrating one into the other in a relationship of dominance.

But how has reason come to be transformed? Marcuse argues that ancient philosophy contained the elements of its demise, a loophole or a "catch", which would ruin the subversive character of thought and thus change the political nature of knowledge and reason. That catch is "formal logic", later known as scientific reasoning:

La logique formelle, en mettant entre parenthèse le contenu et la substance pour ne manipuler que la forme, le symbole abstrait, le signe sans le signifié, forge un instrument facilement malléable et adaptable aux visées de permanence d'une réalité établie qui tente de se constituer en totalité définitive et exclusive. Mais en éliminant le contenu des formes conceptuelles, la logique s'abstrait de la contradiction entre l'existant et l'universel, de sorte que nécessairement "l'abstraction logique est aussi une abstraction sociologique". Elle se débarrasse des sens et des finalités, de l'opposition entre "est" et "devrait", mais risque de dégénérer en un calcul qui ne distingue plus la qualité des êtres et qui peut-être utilisée comme instrument de stabilité et de contrôle.²²¹

At the moment where logic reduces the units of thought to signs and symbols, the laws of thought become embedded in

221- Vachet, Marcuse..., page 47.

technical calculations and manipulations. Thought, as transformed through formal logic, becomes an administrative enterprise at the service of a particular material and historical arrangement.

In modern technocratic society, the neutralization of the thought process, as its subversive qualities are emptied, reduces it to serve the oppressive organization of production and to an instrument of control of individual expression. The mathematical and logistical interpretation of reason reduces it to the quantifiability of things, in partnership with physics. It is thus easy to understand that under this new guise, reality is perceived as an "ensemble" of functions and operations which are useful and have value only in the accomplishment of the whole, not of the individual:

Avec la logique symbolique, la perception rationnelle du monde tend donc à être celle des rapports fonctionnels et opérationnelle entre les êtres, rapport déterminés par l'utilité et l'efficacité à l'exclusion de toute autre valeur ou dynamique.²²²

But the neutrality of reason and/or scientific knowledge is necessarily preconditioned by the neutrality of nature, where these answer to the industrial project. The result is the emergence of the domination of nature... "La nature doit être projetée comme la substance neutre de la domination, comme une matière qui n'offre aucune autre limite à la raison théorique et pratique de l'homme que celle que forme sa

²²²- Ibid.; page 47.

structure mathématique-physique... Cette désacralisation ramène la nature au niveau de l'homme et la prépare à devenir l'objet de son pouvoir et de sa domination".223

The neutralization of reason and of nature also implies the neutralization of science. The consequence being that scientific knowledge is the prototype of rationality. Scientific knowledge has no object other than its function and its usefulness:

Le Bien, le Beau, la Paix, et la Justice, qui résistent à une organisation scientifique et sont des obstacles au rendement et à l'efficacité, sont nécessairement rejetés dans un en-deça de la réalité ou dans le domaine des idéaux dont l'irréalité les coupe de toute objectivité concrète. Ils sont en eux-mêmes des impossibles scientifiques et rationnels en tant qu'ils échappent à l'organisation fonctionnelle. Demeure comme objet de connaissance valable ce qui peut être réduit à une condition d'instrument et pour autant que cela se peut.224

In light of this, all projects of knowledge are technological projects; technology, the instrument, becomes the universal form of knowledge. Acceptable modern reasoning is developed according to instrumentality... knowledge is technology. And in modern "technological" society, knowledge is also information that serves to perpetuate the established order by making it more efficient.

Moreover, domination is also the taking in charge, by particular dominant interests in society, of the management

223- Ibid.; page 48.

224- ibid.; page 49.

process. These interests entered the system as the neutrality of its parts has created a moral emptiness:

Le vide créé par la dé-valorisation de la science la pose comme forme et disponibilité: comme forme à combler, car les formes ne peuvent demeurer sans contenu (excepté dans l'abstraction mathématique ou logique); comme disponibilité à être utilisée par toutes les forces et dominée par la plus puissante. La pensée technologique fournit à la fois des concepts et des instruments qui sont saisis par les force dominante de la société.²²⁵

Ultimately, the ends of science and technology are most definitely linked to the power that utilizes them. Its products are appropriated by the dominant, whose strength and power is determined historically. And given the neutrality of science in modern reasoning, its social control potential is not perceived as such. The goals of science become the goals of politics.

Language is also another aspect of the functionalization and operationalization of society..."en identifiant la chose à ses fonctions, en fixant exclusivement le concept sur une situation, une opération ou un ensemble d'opérations spécifiques, le langage fonctionnel supprime tout "excès" de sens et impose l'univocité des signes et des significations".²²⁶ It becomes a language of domination for it loses the power of significance and meaning, it becomes a technical language that reenforces the dominant philosophy.

²²⁵- Ibid.; page 51.

²²⁶- Ibid.; page 55.

Speaking of philosophy, this is another aspect which has become functional and operational, and has tended to exacerbate the crisis of society and the repression of the individual. The new philosophy requires the elimination of significance in the thought process which would threaten its predominance, while at the same time seeking to operationalize thought to facilitate the establishment of human behaviour compatible with productive rationality:

Le plus important ici est que la philosophie analytique se veut une thérapeutique de la pensée et du discours et, pour ce faire, elle supprime la fonction thérapeutique de la crise philosophique à l'égard de la réalité comme totalité. En ce déclarant positive, la philosophie rejette toute transcendance au-delà du fonctionnement et du non-fonctionnement. Or le fonctionnement se juge ultimement par rapport à un ensemble, à un système qui devient la règle du jugement de sorte que cette philosophie, tout en jugeant de l'utilité des parties, c'est-à-dire de leurs opérations, est impuissante à critiquer la totalité.²²⁷

So, in practice, the different aspects of reason in contemporary society, such as science, language, philosophy, serve to quantify and formalize. They come to justify power as it exists and as it emerged historically; it is thus political in a new ethical and epistemological sense. Functional reasoning pretending to be progressive and modern...

est la rationalité d'un monde qui non seulement fige l'histoire en tant que transformation qualitative du devenir, en tant que contradiction du présent, mais qui supprime même la mémoire et

227- Ibid.; page 58.

l'imagination responsable du contenu et de la qualité du temps. La rationalité fonctionnelle réduit jusqu'au souvenir du passé et jusqu'à l'imagination du possible qui ouvrent l'univers sur les transcendance qualitatives et nourrissent la conscience critique.228

Our critique of the industrial/functional paradigm is that it reinforces the established structure, and stifles the essentially subversive character of the authentic thought process by imposing its scientific and technical interpretation of the role and nature of higher education. Progress is not interpreted in the social sense but rather in the sense of efficiency. The crisis of higher education is the crisis of the whole of modern civilization where repression constructs its own instruments and processes of conservation; higher education has become an instrument of this repression.

In this context, if we are to go beyond and provide the basis for the possibility of revolution, or "real" change, Marcuse postulate what should be considered as the ultimate difference between culture and civilization. Culture is understood as integrating civilization where thought and theory are joined to practice, and where values and their potential are joined to reality and its universal qualities: the Good, the Beautiful. The biological, the historical, and the metaphysical are joined in the unity of the social experience of life.229

228- Ibid.; page 61.

229- Ibid.; page 63. 193

Where culture refers to the superior level of autonomy and human accomplishment, civilization is but the order of the means and mediations in the domain of necessity, work, and behaviour called for by society in which men is not really himself but depends upon. And the historical problem of civilization consist of the fact the possibilities for progress have been diverted by partial social forces imposing their interests.

As well, culture has been transformed to justify or to give dignity to the civilization, even if this culture is not the dynamic force behind the civilization. The integration of cultural values to the existing society eliminates the alienation of civilization from culture and thus reduces the tension or contradiction between "what is" and "what should be", between potential and actual, future and present, freedom and necessity. Thus the integration of culture into civilization has eliminated the potential for qualitative change.

As far as we are concerned, the future of higher education is mitigated by two factors: the crisis of culture and the crisis of civilization. The state of higher education today is the reflection and the subject of this double problem which constitutes the crisis of society as whole.

The dominant paradigm, the industrial/functional approach, is generally pre-occupied by the crisis of

civilization interpreted, not in the larger sense that we have developed, but as translated by the efficiency requirement of the system; an interpretation which is directly the product of the crisis of culture, as defined by thought, philosophy, reason, etc. This paradigm dissimulates, in some instances, the paradox which is, essentially, the double recognition of the liberating and subversive power of knowledge and truth on the one hand, and the other it recognizes the integrating force of education.

The debate over the future of higher education, as we have described it, can be characterized by the insistence, at differing degrees, on one or the other of these two aspects of education. Nevertheless, the dialogue perpetuates the domination of the principle of reality. It tends towards unidimensionality and technicity.

However, even though there seems to be a recognition of the double nature, integrative and liberative, of higher education, as well as a recognition of the crisis of civilization, again varying in degree, few recognize or acknowledge the need to change the system, or at least, to deal with the crisis of higher education as constituent of the crisis of culture. Thus, the insistence on dealing with the crisis of the institution of higher education, the "university", rather than with the whole concept of higher education.

Finally, this synthesis of the Marcusean understanding of the crisis has been an attempt at opening the door for more fundamental dialogue on the issue of higher education and education as a whole, in its essence and nature and in its relationship with society, civilization and culture. Many more critiques of society could also be applied to higher education; we can think of Alvin Toffler, Paulo Freire, or Hannah Arendt. In fact, it would be an interesting follow-up to this study if one were to expose the differing critical analyses of society and apply them to the domain of education. Perhaps then, the debate over the future of higher education in Canada and in Ontario would take on a greater meaning and the perspectives would really differ in essence not just in form.

APPENDIX 1

Ontario System of Post-Secondary Education Institutions Universities:

Ontario has 15 provincially-assisted universities, as well as several other related institutions receiving provincial funding. The first university in Ontario was the University of Toronto, which was granted a charter in 1827. In 1850, it became a non-denominational institution receiving provincial support. It is now the largest university in the country with 34,406 full-time and 15,987 part-time students in the fall of 1986.¹

All 15 universities have graduate schools, 10 offer doctoral programs. In the fall of 1986, there were 185,000 full-time students (18,172 graduates), and 99,253 part-time students (11,759 graduates) in the 15 universities. As well, in the fall of 1986, there were 13,443 full-time faculty members in the provincially-assisted Ontario universities and related institutions.²

In terms of government-university relations, it is the University Relations Branch of the Ministry of Colleges and Universities that plays a central institutional and organizational role: "It is responsible for administering provincial grants to the universities... It develops and

1- Ministry of Colleges and Universities, Backgrounder, Press Release, July 29, 1987.

2- Ibid.

analyses policy proposals relating to university operations, physical resources and their funding. It also implements policy decisions and acts as liaison with the Ontario Council on University Affairs (OCUA) and other university advisory organizations... It administers the degree-granting act and University Research incentive Fund". Finally, the University Relations Branch provides information on general issues pertaining to universities.³

Colleges:

"To enable each individual, through education, to develop his potentialities to the fullest degree and to employ his talents to the greatest advantage", Ontario's network of 22 colleges of applied arts and technology was created. As of November 1, 1986, total full-time enrolment in those 22 colleges was 110,281. 714,785 part-time students registered for the academic year 1985-86.⁴

The colleges are continuously implementing new programs and facilities to meet the accelerated demands of a technological society. Examples of high-tech equipment funded by the MCU range from computer-enhanced instructional systems to computer graphics-videotex equipment to robotics simulators, etc...

3- Ibid.

4- Ibid.

Co-operative sessions with industry provide for the integration of work and school. As well, "the colleges in 1985-86 worked with 5,592 companies to set up 5,605 separate training programs to upgrade the skills of 78,000 employees."⁵

Present Financing of Post-Secondary Education in Ontario

The post-secondary education component of the Established Programs Financing (EPF) arrangements provides large unconditional transfers to the provinces for the general support of post-secondary education. According to the 1981 Parliamentary Task Force on Federal-Provincial Fiscal Arrangements, The 1977 EPF arrangements were the culmination of many years of provincial and federal attempts to rationalize their fiscal arrangements for public programs while retaining national objectives and respecting provincial jurisdiction. Given that the BNA Act and Canadian historical developments have given the provinces virtually full control of education policy, programs, and institutions, neither the federal government nor the Parliament of Canada receive an accounting for these transfers.

In 1970 total expenditures on PSE was \$2.2 Billion. By 1985, this had increased to \$9.3 Billion. This significant increase in the financial role of governments is paralleled

5- Ibid.

by the substantial growth in the colleges and universities. "Canada spent about 27% of its total educational expenditures on PSE in 1970s and in the early 1980s. Canada ranked second (U.S. was first) of the "Big Seven" OECD countries in the portion of total educational expenditures for the post-secondary sector".⁶

In 1987-88, the Ontario government's share of PSE expenditures in basic operating grants to Colleges of Applied Arts and Technology was \$624 million.⁷ By 1986-87, the operating grants to Ontario universities was \$1.338 billion, more than double the figure ten years ago when the total was \$649.3 million. For 1987-88, operating support grants are estimated at \$1.434 billion.⁸ Figures so large are often subject to manipulation; they should serve here only as rough estimates and vantage points.

As far as funding for universities is concerned, the Ontario Council on University Affairs (OCUA) is in charge of advising the minister as to the level of funding required in the next operating year.

Let us note that, until World War II, universities were mostly private (except the University of Toronto), without access to public funding. The 1960s has seen the expansion

6- A Statistical portrait of higher education in Canada, National Forum on Post-Secondary Education, Saskatoon, October 25-28, 1987.

7- MCU, Statistical Summary 1982-83, page 30-31.

8- MCU, Backgrounder, Press Release.

of the publicly funded institutions, thus the establishment of university-government relations. As a result, more formal structures were needed.

Thus , the Committee on University Affairs (OCUA today) and the Committee of Presidents of the Universities of Ontario (COU today) were set up in the early 1960s. As well, the Department of University Affairs, later known as the Ministry of Colleges and Universities, was established in 1965.

In 1967, a formula for operating grants was also established through consultations between the CUA and the CPUO with the government. This facilitated the tremendously rapid growth of the universities' size and numbers as well as the comprehensive application of publicly stated goals.

APPENDIX 2

Terms of Reference of the Committee on the Future Role of Universities in Ontario, 1981.

Following a meeting held November 14, 1980, between the Premier, the Minister of Colleges and Universities and representatives of the executive heads, the formation of the Committee on the Future Role of Universities In Ontario was announced. The committee's terms of reference were given in a statement to the Legislature on November 28, 1980:

To develop a public statement of objectives for Ontario universities in the 1980s expressed in operational terms;

To relate the cost of meeting these objectives to funding levels;

To consider modifications to the funding mechanism that would provide appropriate processes to encourage voluntary institutional adjustments and interinstitutional cooperation to meet these objectives;

To define more clearly the appropriate joint roles of the individual institutions, the Council of Ontario Universities, the Ontario Council on University Affairs and the Government of Ontario;

To recommend such other policy changes as are judged likely to improve the ability of the Ontario universities to meet the agreed upon objectives.

Terms of Reference to The Commission on the Future
Development of the Universities of Ontario, 1984.

...To present to the Government a plan of action to better enable the universities of Ontario to adjust to changing social and economic conditions. The Commission should proceed on the basis that annual increases to the real public resources provided to the universities will reflect the desire to protect the integrity of the universities, to strengthen their ability to contribute to the intellectual, economic, social and cultural foundations of society, as well as to reflect the Government's policy of fiscal restraint and prudent management of public funds.

1. To develop an operational plan which, without reducing the number of universities in Ontario provides for more clearly defined, different and distinctive roles for the universities of Ontario in order to maintain and enhance the quality of university education by ensuring the appropriate concentration of academic strengths in areas of intellectual and social importance;

2. To address the issue of accessibility to university level education in the context of economic realities and in the context of a differentiated university structure;

3. To address the method of distribution of university operating grants with a view to ensuring an adequate and measurable basis for public accountability while enabling the universities to remain autonomous in the governance of the affairs and ensuring that their responsibilities as institutions of higher education are discharged with integrity. The method of distribution should be sufficiently flexible to permit adjustments from time to time in response to the ongoing evolution of the new university structure;

4. To consider the need for mechanisms for regulation, coordination and the provision of advice to the Government, and in particular to clarify the role of the Ontario Council on University Affairs in the context of a new and differentiated university structure.

5. To report its plan of action to the Minister of Colleges and Universities by November 15, 1984.

APPENDIX 3

Agenda of the National Forum on Post-Secondary Education held in Saskatoon, October 25-28, 1987.

Can universities and colleges provide the teaching, training and research which will enable Canadians of the 21st Century to:

- work and live in an information economy?
 - flourish in a bilingual, multicultural Canada?
 - help materially and intellectually in solving the problems of world in turmoil?
1. The socio-economic environment:
 - the international context -- forces at work in the global society;
 - implications for Canada -- nationally and regionally.
 2. The Challenges and opportunities facing post-secondary education in Canada:
 - in the development of human resources;
 - in the advancement of knowledge;
 - in social, cultural and economic development.
 3. Accessibility to and participation in post-secondary education.
 4. The framework for managing and financing post-secondary education:
 - within and among universities;
 - within and among colleges;
 - relationship between colleges/universities and private sector organizations, governments and others.

APPENDIX 4

Members of the National Consortium of Scientific and Educational Societies:

Association for the Advancement of Sciences in Canada
Association Canadienne-française pour l'avancement des sciences
Association of Canadian Medical Colleges
Association of Canadian Universities for Northern Studies
Biological Council of Canada
Canadian Acoustical Association
Canadian Association of Graduate Schools
Canadian Association of Neuroscience
Canadian Association of Physicists
Canadian Association of University Business Officers
Canadian Association of University Research Administrators
Canadian Association of University Teachers
Canadian Bureau for International Education
Canadian Council of University Biology Chairmen
Canadian Federation for the Humanities
Canadian Federation of Biological Societies
Canadian Federation of Students
Canadian Geoscience Council
Canadian Mathematical Society
Canadian Medical Association
Canadian Psychological Association
Canadian Society for Clinical Investigation
Canadian Society for Microbiologists
Canadian Society for the Study of Education
Canadian Union of Educational Workers
Canadians for Health Research
Carleton University Alumni Association
Chemical Institute of Canada
Council of Canadian University Chemistry Chairmen
National Institute of Nutrition
Professional Institute of the Public Service of Canada
Science Council of Canada
Social Science Federation of Canada

BIBLIOGRAPHY

GOVERNMENT AND GROUP/ASSOCIATION PUBLICATIONS

Association of Universities and Colleges of Canada

----- Open Message to the Participants in the National Forum on Post-Secondary Education October 25, 1987, 3pp.

----- University Affairs/Affaires Universitaires June-July 1986, Nov. 1986, Dec. 1986, Jan. 1987, Feb. 1987, Mar. 1987, Apr. 1986.

Canadian Association of University Teachers

----- Forum Notes In Preparation for the National Forum on Post-Secondary Education.

----- Handbook of Policy Statements and Model Clauses 1986, 53pp.

----- It is Time to Take a Stand: University Education and Canada's Youth A Brief presented to the Senate Committee on Youth, Sept. 1985, 27pp.

----- University: Who Needs it? In Preparation for the National Forum on Post-Secondary Education, 8pp.

----- What is the CAUT? October 1985, 12pp.

Canadian Federation of Students

----- A National Education Plan A Brief to the National Forum on Post-Secondary Education, 41pp.

----- Aide Financiere aux Etudiant-e-s, 7pp.
Frais de Scolarite et Droits Accessoires,
Mise a Jour, 30pp.
Documents Presented to Colloque de
l'Universite de Winnipeg, January 14, 1987.

Canadian Higher Education Research Network

----- Paquet, Gilles and von Zur-Muehlen, Max.
Education Canada? Higher Education on the Brink
Monograph Prepared for the National Forum on PSE,
1987, 303pp.

Canadian Society for the Study of Higher Education

----- The Canadian Journal of Higher Education
Vol. XVI, No. 3, 1986, Vol. XVII, No. 1, 2, 3,
1987.

Canadian Union of Public Employees

----- The Facts "Rebutting the Macdonald Report"
Vol. 8, No. 2, March-April 1986.

Corporate-Higher Education Forum

----- Making the Match: Canada's University
Graduates and Corporate Employers, 1986, 73pp.

----- Spending Smarter: Corporate-University
Cooperation in Research and Development, 1985,
103pp.

Council of Ontario Universities

----- Bottoming Out Review 1982-83 to 1985-86,
50pp.

----- Briefing Notes No. 1-27 (Oct. 1983 to Feb.
1987).

----- Continuity and Renewal: The Demands of
Excellence A Response to the Discussion Paper of
the Commission on the Future Development of
Universities in Ontario, 1984, 70pp.

----- COU Tour and Information Campaign Report,
(Feb. 24 to March 10), April 1986.

----- Dr. Selleck, Laura. Manpower Planning and
Higher Education Policy Research Division of COU,
June 1982.

----- The Labour Market of High Technology:
Implications for the Universities Nov. 1983.

----- Federal-Provincial Relations and Support for
Universities 1982, 83pp.

----- Publications and Reports of the Council of
Ontario Universities and Its Affiliates 1962-1986.

----- Response to the Report of the Commission on

PSE in Ontario October 1, 1973, 28pp.

----- Squeezing the Triangle Review 1978-79 to 1981-82, 54pp.

----- Universities, Public Priorities, and the Future of Ontario Summary of A Brief to the Standing Committee on Social Development of the Legislature of Ontario, September 1983.

Dryden, Ken. Youth Report of the Ontario Youth Commissioner, 1986, 52pp.

Federation des Jeunes Canadiens Francais Inc.

----- Proposition pour un Projet de Recherche dans le Domaine de l'Education Post-Secondaire Presented to the Secretary of State, May 1987, 25pp.

Liberal Party of Canada

----- Policy Resolutions 1986 National Convention of the Liberal Party of Canada, November 27-30, 184pp.

----- Rapport Interiminaire du Groupe de Travail National du Parti Liberal sur l'Enseignement Postsecondaire Roland de Corneille, Chairman.

Ministere de la formation professionnelle, Un Nouveau Champ d'Action: La Strategie de Formation Professionnelle de l'Ontario September 1986, 30pp.

Ministry of Colleges and Universities, Ontario

----- Backgrounder
The Commission on the Future Development of the Universities of Ontario...

----- Background Data June 1984.

----- Bird, Richard M. and Bucovetsky, Meyer W. Private Support for Universities Commission Research, October 1984, 88pp.

----- Education Ontario Publication Trimestrielle, Oct. 1986, Mar. 1987, Jun. 1987.

----- Estimates Statement Presented to the

Standing Committee on Social Development, 1986-87, 30pp.

----- Fact Sheet A Summary of Initiatives taken in the Past year by Ministry of Colleges and Universities, Greg Sorbara Minister, 1986-87.

----- Meltz, Noah M. and Stager, David. Universities and the Supply of Graduates to the Professions Commission Research, June 1984, 47pp.

----- News Release Communication Services Branch Aug. 28, Oct. 9, 15, 20, 28, Nov. 3, Dec. 5, 1986 Feb. 4, Mar. 10, June 26, July 26, 1987.

----- The Ontario Operating Formula Manual A Manual Governing the Distribution of Ontario Government Operating Grants to Ontario Universities and University-Related Institutions 1985-86 Fiscal Year, September 1985, 98pp.

----- Ontario Universities 1984: Issues and Alternatives Edmund C. Bovey Chairman, June 1984, 29pp.

----- Ontario Universities: Options and Futures Edmund C. Bovey Chairman, December 1984, 64pp.

----- Perspectives November 1986, January 1987.

----- The Report of the Committee on the Future Role of Universities in Ontario H.K. Fisher Chairman, August 1981, 52pp.

----- The Report of the Committee on University Education in Northeastern Ontario June 1983, 41pp.

----- Research Brief "Employment Survey of 1985 Graduates of Ontario Universities" Summary Report, Queen's Printer for Ontario, 1987, 52pp.

----- Stager, David. Accessibility and Demand for University Education Commission Research, June 1984, 46pp.

----- Statistical Summary 1982-83, 42pp.

----- Tour d'Horizon: Guide de l'Education Postsecondaire en Ontario 1987-88, 54pp.

National Consortium of Scientific and Educational Societies

----- Backgrounder to Lobby Week January 1988.
National Forum on Post-Secondary Education

National Forum on Post-Secondary Education

----- A Statistical Portrait of Higher Education in Canada Saskatoon, Oct. 25-28, 1987, 24pp.

----- Background Document Saskatoon, 1987, 16pp.

----- The Spirit of Saskatoon Saskatoon, 1987, 8pp.

Natural Sciences and Engineering Research Council of Canada

----- Report of the President 1985-86 Ottawa:
Ministry of Supply and Services, 1986, 73pp.

Ontario Council on University Affairs

----- Annual Reports 9-13 (1982-83 to 1986-87).

Ontario Federation of Students

----- Les Etudiants et le RAFEO Rapport de l'Equipe
d'Analyse du RAFEO, 22pp.

----- McVay, Peter (Researcher) Stereo Assistance
is a Stereotype January 1986.

----- Progress Report: A Year-End Update on OFS
Lobbying June 1987.

----- Students Respond to Parties Positions on PSE
News Release, Aug. 27, 1987.

----- Youth Asking Questions Task Force Report
Spring 1987, 38pp.

Ontario Institute for Studies in Education

----- 1986: Public Attitudes towards Education in
Ontario Sixth OISE Survey on General Issues
(Analyzed by D.W. Livingstone, D.J. Hart, and L.E.
Davies)

Premier's Council Background Report June 19, 1987.

Report of the Parliamentary Task Force on Federal-Provincial
Fiscal Arrangements Fiscal Federalism in Canada
Ottawa:Min. of Supply and Services, 1981, 214pp.

Science Council of Canada

----- Social Science Research in Canada: Stagnation or Regeneration? Proceedings of Conference held in October 1984, Ottawa: Min. of Supply and Services, 1985, 273pp.

Secretary of State

----- Federal and Provincial Support to Post-Secondary Education in Canada A Report to Parliament, 1985-86, 168pp.

----- Johnson, A.W. Giving Greater Point and Purpose to the Federal Financing of Post-Secondary Education and Research in Canada A Report prepared for the Secretary of State, February 1985, 55pp.

----- La Promotion de 1982 Rapport Sommaire de l'Enquete Nationale de 1984 aupres des Diplomes de 1982, Ottawa: Min. of Supply and Services, 1986, 186pp.

----- Minutes of Proceedings and Evidence of the Standing Committee on Secretary of State In Accordance with its Mandate under Standing Order 96(2), An Examination of Student Aid Program, Issue No. 3, December 9, 1986.

Social Sciences and Humanities Research Council

----- Annual Report Supplement: 1984-85 Ottawa: Min. of Supply and Services, 1986, 111pp.

----- Five Year Plan for Financing Research in the Social Sciences and Humanities 1985-1990 Ottawa: Min. of Supply and Services, 1985, 142pp.

Social Science Federation of Canada

----- Communique "Des Promesses et des Espoirs: La Nouvelle Politique de Subventions de Contrepartie et le Financement de la Recherche et Developpement au Canada"
Nov. 25, 1986.

OTHER PUBLICATIONS

Arendt, Hannah. La Crise de la Culture Edition Gallimard, 1972, 380pp.

Buchbinder, H. and Newson, J. The University Means Business Toronto: Garamond Press, 1988, 103pp.

Freire, Paulo. Pedagoogy of the Oppressed New York: Continuum, 1982, 186pp.

Trent, John E. and Lamy, Paul eds. Global Crisis and the Social Sciences: North American Perspectives Ottawa: University of Ottawa Press, 1984. (Proceedings of a UNESCO Symposium on the Fundamental Problems of , and Challenges for, the Social Sciences in North America, May 3-7, 1983.), 276pp.

Vachet, Andre. Crise de Civilization et Universite: Enseigner Aujourd'hui Ottawa: Edition de l'Universite d'Ottawa, 1984. 53pp.

----- Marcuse: La Revolution Radicale et le Nouveau Socialisme Ottawa: Edition de l'Universite d'Ottawa, 1986. 226pp.

NEWSPAPERS

Citizen, "PM Pledges \$1.3 Billion for Technological Research" January 11, 1988, page A18.

Sunday Star, "Our Universities in Crisis" Editorial June 1987, page B2.

Toronto Star, "Seeking New Paths to Lead Canada to High-Tech Peaks" October 22, 1987, page A22.