

**THE LIMITS TO INFLUENCE:
THE CLUB OF ROME AND CANADA,
1968 TO 1988**

by

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Declaration

**AUTHOR'S DECLARATION FOR ELECTRONIC SUBMISSION OF A
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I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Abstract

This dissertation is about influence which is defined as the ability to move ideas forward within, and in some cases across, organizations. More specifically it is about an extraordinary organization called the Club of Rome (COR), who became advocates of the idea of greater use of systems analysis in the development of policy. The systems approach to policy required rational, holistic and long-range thinking. It was an approach that attracted the attention of Canadian Prime Minister Pierre Trudeau. Commonality of interests and concerns united the disparate members of the COR and allowed that organization to develop an influential presence within Canada during Trudeau's time in office from 1968 to 1984.

The story of the COR in Canada is extended beyond the end of the Trudeau era to explain how the key elements that had allowed the organization and its Canadian Association (CACOR) to develop an influential presence quickly dissipated in the post-1984 era. The key reasons for decline were time and circumstance as the COR/CACOR membership aged, contacts were lost, and there was a political paradigm shift that was antithetical to COR/CACOR ideas. The broader circumstances that led to the rise and fall of the COR/CACOR's influential presence in Canada from 1968 to circa 1988 also provides a fascinating opportunity to assess political and intellectual tumult and change.

Specific organizations where the COR/CACOR's influential presence was felt included: the Ministry of State for Science and Technology, the International Development Research Centre, the Institute for Research on Public Policy, the Foundation for International Training, and the University of Guelph.

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This dissertation would not have been possible without the assistance of a wide range of groups and individuals. A debt of gratitude is owed to the members of my supervisory committee: Drs Heather MacDougall, John English, Robert Campbell, Debora VanNijnatten, and, for a time, Catherine Wilson. A similar debt is owed to all listed in the Conversation and Correspondence sections of the bibliography. Content for the dissertation was also attained through the assistance of staff at the following: National Archives of Canada, University of Guelph Arboretum, North Gower Branch Ottawa Public Library, International Development Research Centre, Foundation for International Training and *Playboy*. In addition Kerry Tremblay's editing was greatly appreciated.

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The Limits to Influence: Overview and Context

This dissertation is about an idea called systems analysis that blended with an extraordinary organization called the Club of Rome (COR), and the circumstances that allowed the organization advocating the idea to have an influential presence in Canada during the Prime Ministerial reign of Pierre Elliott Trudeau from 1968 to 1984. This dissertation also concerns intellectual precursors to policy development advocated during Trudeau's time in office. It is about the thinking behind how policy problems ought to have been approached from a particular theoretical viewpoint. It is not about the creation and implementation of specific policy initiatives during the Trudeau era.

The rise and decline of the COR and its Canadian Association, (CACOR)'s influence occurred during Trudeau's time in power. This was no coincidence. A synergistic relationship was created as the systems approach to policy development advocated by the COR/CACOR dovetailed with the Trudeau-era approach to and philosophy regarding public policy development. This dissertation, then, is a work of intellectual political history that examines how an idea becomes adopted by groups, spread via common connections, and adapted to suit differing circumstances.

Historians are inherently storytellers. But they are bounded by the discipline's requirements to prove a hypothesis based on careful observation of collected factual evidence. To draw an outline of events, or to limit an exploration of a topic to parameters established by limited models is not sufficient. Political science theories and policy analysis methodologies provide important insights and are inherently valuable. Academic fields such as political science provide an important lens for historians to view and understand the events in their narratives. However, the role of the historian is to identify

key actors, to outline key ideas, motivations, and events, and to present the different parts of the story within the context of the contemporary times of the events discussed.

Inherent in historical methodology is a dependence upon the works of others. This dissertation is particularly indebted to works from a variety of fields including: history, political science, journalism, philosophy, ecology, information technology, engineering and popular culture. As this study is Canadian-based, the secondary literature is predominantly Canadian.

Academics such as John Hodgetts, Donald Savoie, Nicole Morgan, and Jack Granatstein helped to explain the development of the public policy process. Hodgetts' exhaustive work on the history of the Canadian civil service from its beginnings to the post World War II era told the story of an institution struggling to find and maintain a consistent vision and role for itself in the midst of uncertainty, tumult, and expansion of governmental activity, especially in, during, and after the Second World War.¹ The expansion of the federal bureaucracy and its services created numerous administrative problems described in the works of Donald Savoie, Nicole Morgan, Bruce Doern, Jack Granatstein and others. Problems of increasing numbers of bureaucrats with increasing workloads, often with a lack of political direction, led to the perception that by the end of the 1960s Canada's bureaucracy was not working as efficiently as it ought to have been.²

¹ J. E. Hodgetts, William McCloskey, Reginald Whitaker and V. Seymour Wilson, *The Biography of an Institution: The Civil Service Commission of Canada 1908-1967*, (Montreal: McGill-Queen's University Press, 1972), pp.16-19, pp.40-41, pp.56-60, pp.82-83, p.115 and pp.137-142.

J. E. Hodgetts, "Public Power and Ivory Power," in Trevor Lloyd and Jack McLeod, (editors), *Agenda 1970: Proposals for a Creative Politics*, (Toronto: University of Toronto Press, 1968) pp.256-280.

J. E. Hodgetts, *The Canadian Public Service: A Physiology of Government 1867-1970*, (Toronto: University of Toronto Press, 1973), pp.22-25.

² Nicole Morgan, *Implosion: An Analysis of the Growth of the Federal Public Service in Canada (1945-1985)*, (Montreal: Institute for Research on Public Policy, 1986).

Donald J. Savoie, *Governing From the Centre: The Concentration of Power in Canadian Politics*, (Toronto: University of Toronto Press, 1999), p.198.

During the 1960s there was general agreement among political actors, pundits and possibly the general public, that politics and the policy making process was in need of reform.³ In 1960 the pressure to act on perceived problems led to the creation of arguably, one of the most influential Royal Commissions in Canada's history, the John Grant Glassco Commission. The commission's findings undermined the old system and have influenced how bureaucrats operate ever since. Glassco provided the mantra of "let the managers manage" that proved to be the dominant slogan of civil service reform since the report's publication in the early 1960s.⁴ While bureaucratic reform was important among the chattering classes, there also appeared to have remained a longing for a new kind of politics to emerge to replace the stodgy style of politics evident in the 1960s with rather staid political leaders.

It was a sense of change that Trudeau was able to excite in people that led to the emergence in 1968 of Trudeaumania that swept him and the Liberals to power. However, Trudeau was not a political opportunist, nor, especially in his first term to 1972, was he a pragmatist who governed by playing close attention to public opinion. A similar sense of attracting public opinion, but not being governed by popular opinion also applied to the Club of Rome (COR), especially in their early years from 1968 to 1974. There has not been as much secondary research on the origins, and early activities of the COR as there

³ Writer Christina McCall-Newman similarly argued that during the Pearson era, a consensus emerged that the established bureaucracy had to be placed under tighter political control, become more accountable, efficient and was in need of new personnel in order to infuse the civil service with new intellectual ideas.

Marc Lalonde, "The Changing Role of the Prime Minister's Office," *Canadian Public Administration*, (Volume 14 No. 4, Winter 1971), p.511.

Christina McCall-Newman, "Michael Pitfield and the Politics of Mismanagement," *Saturday Night*, (October, 1982), p.32.

⁴ John G. Glassco, (Chairman), *Royal Commission on Government Organization, First Report on Progress*, (Ottawa: Queen's Printer, 1961).

Allen Thomas Lambert, H. Marcel Caron, John Edwin Hodgetts, and Olive Gerald Stoner, *Royal Commission on Financial Management and Accountability: Progress Report*, (Ottawa: Minister of Supply and Services Canada, 1977), p.3.

Morgan, *Implosion*, pp.52-55.

has been of Trudeau. However, works by Peter Moll and S.W. Verstegen and a biography of Aurelio Peccei by Gunthier Pauli provide important contextual information about COR its origins and public reactions to the group and the reports it sponsored.⁵

It was a unique set of circumstances in the late 1960s that led to the emergence of a collective of renowned individuals, known as the Club of Rome, who shared a common concern about the future of industrial civilization. The first two chapters provide the requisite overview of the events and movements internationally and domestically that led to the emergence of the Club of Rome in 1968, the same year Pierre Trudeau was elected Prime Minister. The 1960s was a decade of frustration with the past, and the then present. It was also a time in which there was great optimism in the generation's ability to do things differently and to create a better future. That context is necessary in order to appreciate how an organization such as the Club of Rome and an intellectual like Pierre Trudeau were able to capture, for a time, the public imagination.

Both ecological and history of science writers present the argument that it was in the United States that the modern ecology movement emerged. Authors Barry Commoner, Barabra Ward, and Alvin Toffler built upon the populist groundwork laid by Harrison Brown and Rachel Carson in moving forward a movement that was deeply concerned about humanity's reciprocal relationship to its environment and about the future of life on Spaceship Earth.⁶ The broader environmental and ecological concerns were given apparently computer-based scientific validity in the first COR-sponsored

⁵ Peter Moll, *From Scarcity to Sustainability: Futures Studies and the Environment: the Role of the Club of Rome*, (Frankfurt: Peter Lang, 1991).

Gunter A. Pauli, *Crusader for the Future: A Portrait of Aurelio Peccei Founder of the Club of Rome*, (Oxford: Pergamon Press, 1987).

S.W. Verstegen, "Environmental Consciousness in the Netherlands and the First Report to the Club of Rome (1971-1983)," (Unpublished Paper presented at: European Society for Environmental History conference, Prague, 2-8 September 2003), p.2.

⁶ Barbara Ward, *Spaceship Earth*, (New York: Columbia University Press, 1966), p.146.

publication, *The Limits to Growth* in 1972 out of the Massachusetts Institute of Technology. International events the next year created an energy crisis that sent shockwaves through the industrialised world. That crisis was a proof of concept for the MIT report in terms of the interrelated nature of geo-politics, economics and the contingent nature of prosperity for industrialized nations. Chapters three and seven explore how *The Limits to Growth* attracted a great deal of notoriety and public exposure, for good and ill, for the report's sponsor, The Club of Rome (COR). As will be discussed, for the COR, *Limits* proved to be a doubled edged sword.

In the years before 1972 the COR may not have been on the minds of many Canadians, but the group had already succeeded in attracting the attention of Prime Minister Trudeau. COR co-founder Alexander King commented that soon after its establishment in 1968 Trudeau "stimulated our thinking on the Club's philosophy and methods." Trudeau's interest led to the Canadian government sponsoring a COR meeting at Montebello in 1971.⁷ As discussed in chapter three, it was the critical meeting that led to *The Limits to Growth* report becoming a reality.

As will be discussed further in chapter four, with Trudeau's backing, in 1974 Canadians Rennie J. Whitehead, Senator Maurice Lamontagne, Ronald Ritichie, William Stadelman and Robert Fowler, among others, decide to establish a Canadian Association for the Club of Rome (CACOR).⁸ It was the formalization of an organization that had been in unofficial operation since the COR itself was founded in 1968. Having the Prime Minister's attention, and that of key cabinet ministers and civil servants such as Alastair

⁷ Alexander King, "In a Well-disposed Country," in Roseann Runte, (editor), *The Foundation for International Training: Twenty-Five Years Dedicated to International Development*, (New York: Legas, 2001), p.15.

⁸ R. H. Clayton, "The Birth of the Association," *CACOR Newsletter*, (11 September 1974), pp.1-6.

Gillespie, Michael Pitfield, Ivan Head, C. R. Nixon and others played a critical role in COR's and CACOR's successes discussed in this dissertation.

The Trudeau Era – The Historiographical Absence of Systems Analysis

However, at the most fundamental level, Trudeau was the critical hinge upon which both the COR and CACOR's fortunes in Canada swung. Consequently it was necessary to delve into the vast literature on Trudeau's time in power. Of greatest contextual assistance were the works of Christina McCall (McCall-Newman), Stephen Clarkson, Donald Savoie, Joseph Wearing, Bruce Doern, Robert Bothwell, Ian Drummond, John English, and Robert Campbell. Their writings are most relevant to a study of systems analysis in Canada as the authors provided a rich tapestry of stories, opinions, and explanations from which to draw. Works such as *Trudeau and Our Times*, *Grits*, *Governing From the Centre*, *The L-Shaped Party*, *Canada Since 1945* and *Grand Illusions* provided invaluable glimpses into the personalities and events that shaped the events, opinions and characters in this study.

Within that secondary literature there is only passing, if any, reference to the Club of Rome and systems analysis in Canada during the Trudeau era. In both *Grits* and *Trudeau and Our Times* explicit and implicit mention is made of Trudeau's and his aide Michael Pitfield's, interest in systems analysis and how they sought to implement systems ideas as a part of the functioning bureaucratic system.⁹ Christina McCall, in *Grits*, does not delve into her argument that an abiding interest in "cybernetics and other

⁹ Stephen Clarkson and Christina McCall, *Trudeau and Our Times Volume I: The Magnificent Obsession*, (Toronto: McClelland and Stewart, 1990), pp.116-117, p.136. (Hereafter Clarkson and McCall, *Volume I*).

technocratic ideas” by Pitfield “fitted in well with Trudeau’s views on ‘functionalism.’”¹⁰ She later commented that cybernetics – the science of communications and control in machines, living organisms and societies - connected to effective planning was “an idea that was in intellectual vogue in the 1960s.”¹¹

Similarly in their discussion of the origins of the Department of the Environment (DOE) academics Bruce Doern and Thomas Conway make passing reference to Trudeau’s three meetings with the COR before the DOE was established. Doern and Conway noted that Trudeau’s “environmental instincts” were sharpened through such meetings, but they do not go into an in-depth explanation of how or why the COR influenced Trudeau’s thinking.¹² The how and the why of the transference and morphing of ideas to suit differing political purposes are two key questions that are addressed in this work.

Systems analysis and underlying approaches to policy development were not central foci for Christina McCall, Stephen Clarkson, Bruce Doern or other writers on Trudeau’s time in power. Consequently issues related to the sources of systems ideas, the development and nuances of systems thinking, and the links to external organizations also interested in systems analysis were not explored. This dissertation provides a deeper explanation of how systems ideas came to be in vogue. It also explains why Trudeau and others were drawn to systems analysis, and it examines why bureaucratic support for the use of systems analysis as policy tools dissipated by the late 1980s.

¹⁰ Christina McCall-Newman, *Grits: An Intimate Portrait of the Liberal Party*, (Toronto: Macmillan of Canada, 1982), pp.104-105.

¹¹ McCall-Newman, *Grits*, p.212.

-- “Cybernetics,” in Frank Abate (General Project Editor), *Reader’s Digest Oxford Complete Word Finder*, (Pleasantville: The Reader’s Digest Association, Inc., 1996), p.348.

¹² G. Bruce Doern, and Thomas Conway, *The Greening of Canada: Federal Institutions and Decisions*, (Toronto: University of Toronto Press, 1994), pp.19-20.

This study takes the contextual information provided in the general secondary literature mentioned above and detailed in the bibliography as a starting point. From there it delves into the critical aspect that differentiated the Trudeau government from both his predecessors and successors – the implementation of systems-analysis-based holistic long-range thinking as the underlying approach to public policy development. Trudeau’s reforms to the cabinet system illustrated this new fundamental approach. His insistence that Cabinet ministers develop multiple options to all policy issues, and that each cabinet minister be full informed about and involved in the development of all government policy reflected a concern that the people who ran the country develop a holistic approach to policy development.

Trudeau believed that the new approach would help to end the older *ad hoc* approach to policy development that he perceived as being the mode of operation in the Lester B. Pearson cabinet. He also hoped it would lead to intellectual cross-fertilization and policy creativity. In terms of creativity, Trudeau likely shared a common opinion of bureaucratic meetings with COR co-founder Alexander King. As Science Director for the Organization for Economic Cooperation and Development (OECD) and as an individual who had numerous outside interests, King served on multiple boards and committees. He said that too often within bureaucracies there was insufficient attention and time allotted at meetings “for the generation of ideas.”¹³

Trudeau’s new approach was meant to foster collegiality, to encourage collective responsibility, and to encourage creativity.¹⁴ Moreover, the Prime Minister sought to

¹³ King, “In a Well-disposed Country,” p.17.

¹⁴ Herb Gray, Conversation with Graduate Students Centre for International Governance Innovation, January 2005. (Hereafter Gray Interview).

Allan MacEachen, Conversation with Author, September 2003. (Hereafter MacEachen Interview).

ensure that ideas were generated and vetted by his cabinet in a holistic manner with an appreciation for the interrelationship of policies and future consequences of policy decisions. Chapter three explains how Trudeau's holistic policy approach melded with the emergent field of systems analysis. The chapter also explains the appeal of systems analysis to the Club of Rome. Given that Trudeau and the Club of Rome and its Canadian Association were drawn to systems analysis, it is not surprising that synergies emerged between the COR/CACOR and the government led by Trudeau. The impacts and consequences of that relationship are detailed in chapters four and five.

Ivory Tower and Electoral Power

Trudeau was also imbued with intellectually charged, but largely politically impractical, ideas such as the Just Society and participatory democracy that formed part of a larger abstract but unified vision. Trudeau and other like-minded individuals believed that society could be governed based upon rational consideration of long-term interests and the collective good. Problems for thinkers such as Trudeau, Peccei and others, emerged when the world of rational political theory clashed with pragmatic political reality. The book *Canada Since 1945* commented "The Just Society was perhaps a dream that could not be fulfilled; the vexations and vanities of man would forever prevent fulfilment.(sic)"¹⁵

While the idea of Canada as a Just Society may have never matured beyond infancy, Trudeau's idea of participatory democracy proved to be a stillbirth. Announced with great fanfare in 1969 at Harrison Hot Springs in British Columbia, participatory

Allistair Gillespie, Conversation with Author, June 2004.

¹⁵ Robert Bothwell, Ian Drummond and John English, *Canada Since 1945: Power Politics, and Provincialism*, Toronto: University of Toronto Press, 1981), p.369.

democracy was to have been a new grass-roots approach to public policy development. Rank and file Liberals were to propose, debate and recommend policy that subsequently was to become part of the governing party's platform.¹⁶ As time passed in Trudeau's first mandate, the idealism of greater participatory democracy promised at Harrison fell into abeyance as the economic and governance realities of Canadian politics took hold. As Trudeau advisor Jim Coutts said: "Though Trudeau talked about "participatory democracy," he had little idea how it would work."¹⁷

Liberal insider Joseph Wearing explained the inherent difficulties of the participatory model evident at the 1970 convention where nearly 400 resolutions (some combinations of which were contradictory) were voted upon. The end result was the writing of the "Liberal Charter for the Seventies." Wearing lamented however, "It had all led to nothing. Neither Trudeau, nor any other of the proponents of participation were prepared to fight for it."¹⁸ Journalist Christina McCall-Newman said of Trudeau's participatory democracy theory, "Rationally it all made sense. It was a model plan for a model party in some idealized democracy.... The trouble was it didn't work."¹⁹

The clash of theory and reality is a theme that was evident throughout Trudeau's time in office and it permeates this work as well. Chapters six and seven explore the

¹⁶ McCall-Newman, *Grits*, p.122.

Pierre, E. Trudeau, "Notes for Remarks by the Prime Minister at the Harrison Liberal Conference Harrison Hot Springs, British Columbia, November 21, 1969," (NAC: MG28 Volume 1165 File "Harrison Liberal Conference,") pp.1-2, p.10.

Lorna Marsden, "The Party and Parliament: Participatory Democracy in the Trudeau Years," in Thomas S. Axworthy, and Pierre Elliott Trudeau (editors), *Towards a Just Society: The Trudeau Years*, (Toronto: Penguin Books, 1992), p.316.

Joseph Wearing, *The L Shaped Party: The Liberal Party of Canada 1958 –1980*, (Toronto: McGraw-Hill Ryerson Limited, 1981), p.162.

¹⁷ Jim Coutts, "Trudeau in Power: A View from Inside the Prime Minister's Office," in Andrew Cohen, and J. L. Granatstein (editors), *Trudeau's Shadow: The Life and Legacy of Pierre Elliott Trudeau*, (Toronto: Random House of Canada, 1998), p.146.

¹⁸ Wearing, *The L-Shaped Party*, pp.166-171.

¹⁹ McCall –Newman, *Grits*, pp.122-123.

ramifications of worlds colliding as the rationalist world of ideas was dragged to the ground by the empiricist-laden world of electoral politics. Trudeau faced stiff resistance to his new policy approaches from within his own cabinet. Experienced cabinet ministers from the Lester B. Pearson era, such as Alan MacEachen, Don Jamieson, Mitchel Sharp, Eugene Whelan, and Eric Kierans were especially pointed in their criticisms. For Aurelio Peccei, Alexander King, Rennie Whitehead and other COR and CACOR members, the seemingly perpetual problems of political leadership became an intractable problem. To strive towards a state of equilibrium and to control growth would have required measures that would have inflicted short and medium-term difficulties and been politically unpopular. Pragmatic political expediency was a Gordian Knot that bound any possible solutions to the global problems discussed below and was referred to by the COR as the *Problematique*. That realization on the part of COR members had a profound impact and is explored in chapter seven.

Aurelio Peccei and Pierre Trudeau: Kindred Thinkers

It was the use of various primary source materials that created the novel aspects of this narrative. A close study of archival sources, published political memoirs, contemporary media coverage, *Hansards* and other primary sources helped to present an overview of the key personalities involved in, and their perspectives on, policy development, systems analysis and the Club of Rome in Canada when the events were unfolding. The intellectual minutiae of Canadian public policy during the Trudeau era were subsequently provided through interviews with individuals such as Allan MacEachen, Rennie Whitehead, and Allistair Gillespie. Those insights were

supplemented by conversations held with key players who, unfortunately, are no longer with us, Ivan Head and Mitchell Sharp.

The Club of Rome (COR) side of the story was provided through archival work at the Canadian Association for the Club of Rome (CACOR) Archives in Guelph and media studies. Further details and insights were attained and interviews with key individual COR and/or CACOR members. Included in that list are: Rennie Whitehead, Dennis Meadows, Jay Forrester, Roy Megarry, Ranjit Kumar, Jane Dougan, and Kenneth Hammond. That information was further supplemented with correspondence from key individuals such as Alexander King, Marshall Crowe, and William Stadelman.

The story that emerges from the conversations, correspondences, and documents used for this dissertation is one of the power of like-minded individuals to facilitate the spread of ideas and to adopt them to different circumstances. This dissertation is also the story of the ultimate limits to the influence that ideas and their advocates can have. One of the key stories, within this broader narrative is of the like-mindedness of COR co-founder Aurelio Peccei and Prime Minister Trudeau.

Any history of the activities of the Club of Rome (COR) has to include a discussion of its co-founder, main financial backer and intellectual driving force - Aurelio Peccei. The COR was a child of his imagination and ambition. It became Peccei's main preoccupation from its founding in 1968 until his untimely death in 1984. The spread of the COR and its ideas were integrally linked to Peccei's efforts and it is not surprising that when Peccei died, the organization was thrown into a state of disarray.

Born in Italy in 1908 to a lower middle-class family, Aurelio Peccei came into the world on the verge of a tumultuous set of decades.²⁰ He was a child of ten when the First World War finally ended in 1918 and Europe was left in disarray. In his home country, that sense of disorder planted the seeds for the emergence of Benito Mussolini and his Fascist supporters. Peccei believed he was born at a time when humanity could have been making great strides towards “the abolition of poverty and a life of dignity for all [but] ... egoism and narrow views ... [transformed humanity] into a grotesque, unidimensional *Homo economicus* (sic),” and the chance for advancement was squandered.²¹ He claimed that he was raised “as a free thinker.... an intense student,” who in the mid-to-late 1920s while the Fascist forces were gaining control of Italy, was engaged in academic studies at the University of Turin. He continued his studies in economics and languages due to a doctoral scholarship from France’s prestigious Sorbonne. His studies brought him to France and the Soviet Union and in 1930 he finished his dissertation on “Lenin’s New Economic Policies”.²²

Peccei’s talents attracted the attention of the Italian car company Fiat, which subsequently sent him to head up operations in China where he resided until, in 1937, Italy’s alliance with Japan (and potential conflict with China as World War II loomed), eventually forced Peccei to be recalled.²³ Once back in his native country, Peccei used his status as an Italian businessman, “not yet on the lists of the political police,” to organize support for the anti-fascist Italian underground group Giustizia e Libertà. In February

²⁰ Moll, *From Scarcity*, p.49.

Aurelio Peccei, *The Human Quality*, (Oxford: Pergamon Press, 1977), p.1.

²¹ Peccei, *The Human Quality*, p.1.

²² Peccei emphatically claimed that he was never a Marxist and never followed “any other ideology”.
Moll, *From Scarcity to Sustainability*, p.50.

Peccei, *The Human Quality*, p.3.

²³ Peccei, *The Human Quality*, p.5.

1944, he was routed out by the fascist forces, arrested and sent to jail where he was roughly interrogated over the course of several months.²⁴

Peccei's incarceration was a pivotal moment that intensely affected him. He became a workaholic with a profound social conscience and a strong belief in humanity's ability for progress in the face of adversity. He said of the experience that it was one of "the most enriching periods of my life and I consider myself truly fortunate that it all happened... [he became] convinced that lying latent in man is a great force for good, which awaits liberation; and that modern society has yet to discover the way of liberating it."²⁵ As discussed in this study, that core set of beliefs was to be expanded and enhanced in his post-war career as he became heavily involved traveling the world and in developing and managing industrial schemes from Italy to Argentina.²⁶

It was during an address by Peccei to an Argentinean audience in September 1965 that the seeds were inadvertently planted that led to the emergence of the Club of Rome. The speech expressed Peccei's concerns about the impact of the emerging "second industrial revolution" on developing nations, and on the subsequent stability of the entire world. He argued that computerization, automation, advanced communications, and informational technologies were transforming the world in ways that exceeded the disruptions that accompanied the first industrial revolution that multiplied humanity's physical strength. He further argued that the second industrial revolution multiplied human intelligence and thus provided the basis for the establishment of a self-

²⁴ Peccei, *The Human Quality*, pp.6-7.

²⁵ Peccei, *The Human Quality*, p.8.

²⁶ After being released from prison in January 1945, Peccei continued to work for the resistance until the end of the war. For his efforts, at the end of the war the Committee of National Liberation appointed him a Commissioner for Fiat in charge of reconstructing its heavy industry. The task was made difficult due to the loss of approximately 60% of capacity during the war and the need to quietly remove known fascists and collaborators from Fiat's ranks, while ensuring their safety.

Peccei, *The Human Quality*, p.8.

perpetuating cycle of technological advances.²⁷ Peccei also expressed a deep concern that the United States had the potential to become dominant and to create a unipolar world as it was the home of computerization.²⁸

Peccei's twin concerns attracted the attention of Soviet scientist Dzhermen M. Gvishiani, who contacted his friend, Alexander King, who was the Director General for Scientific Affairs of the Organization for Economic Cooperation and Development (OECD). Gvishiani inquired whether a meeting could be arranged with Peccei. While King did not know Peccei at the time, the three eventually met in 1967 to discuss the condition of the world and its future prospects.²⁹ King and Peccei soon discovered themselves to be similar in thought and attitude and endeavoured to invite other leading academics, bureaucrats and industrialists for further discussions.³⁰ The story of how the additional meetings led to the formalization of the Club of Rome in 1968 is provided in more detail in a subsequent chapter.

The importance of the story to this introduction is the notion of similar-mindedness that became a key feature of the Club of Rome (COR). It was not that its members agreed on matters, but they all shared a common concern for the future of humanity and the ecological health of the earth. Peccei once remarked that he was

²⁷ Peccei subsequently explained in a 1967 piece that developing countries were at a distinct disadvantage as the second industrial revolution tended to strengthen countries already in a stronger position and it was difficult for the developing nations to get the requisite technology for advancement.

Aurelio Peccei, "The Challenge of the 1970s for the World of Today: A Basis for Discussion," in Gunter Pauli, *Crusader*, p.105.

Peccei, *The Human Quality*, p.57.

Aurelio Peccei, (General Chairman), *International Development 1967 International Technical Cooperation: Evaluation and Prospects*, (Dobbs Ferry: Oceana Publications, Inc., 1968), p.4.

²⁸ Peccei, "The Challenge," p.105

²⁹ Pentti Malaska, "A Rebellion Against Ignorance," in Pentti Malaska and Matti Vapaavouri (editors), *The Club of Rome*, (Turku: Finnish Society for Future Studies, 1984), p.39.

Peccei, *The Human Quality*, pp.50-52.

³⁰ Alexander King, "The Club of Rome: A Case Study of Institutional Innovation," in Pentti Malaska and Matti Vapaavouri, (editors), *The Club of Rome*, (Turku: Finnish Society for Future Studies, 1984), p.4.

Peccei, *The Human Quality*, p.63.

motivated by “the conviction one gets travelling far and wide in a world observing the growing confusion and complexity of the problems and expectations of our age...” He quickly added that he was “not a pessimist.”³¹ Expanding on his thoughts, Peccei subsequently stated that he had

looked at the world through the eyes of a manager who sees that too many grave problems remain unsolved and become more serious every year, while others emerge ominously and intertwine with them; and who proposes to find out how this continuing degradation of the global situation amidst peaks and plateaus of material (though uneven) progress can be stopped, things thought out anew, and the whole business of human affairs conducted in a more intelligent way.³²

Peccei sought and found others with similar convictions. The numerous problems facing humanity at the time were collectively referred to as the “World Problematique”, or the Problematique for short. It was the single aspect that united COR members behind a common “conviction that human well-being depend[ed] on how the world Problematique [could] be mastered.”³³ Peccei proclaimed that ‘if the Club of Rome [had] any merit, [it was] that of having being the first to rebel against the suicidal ignorance of the human condition.’³⁴

Peccei had said that any person wishing to be involved in a project as ambitious as the COR’s had to believe that it was ‘not impossible to foster a human revolution capable of changing our present course’.³⁵ He further thought that it required motivated individuals with “a solid scientific and humanistic background, some experience in the

³¹ Aurelio Peccei, *The Chasm Ahead*, (Toronto: The Macmillan Company, 1969), p.1.

³² Peccei, *The Chasm*, p.261.

³³ King, “The Club of Rome,” p.6.

³⁴ Eleonora Barbieri Masini, “The Legacy of Aurelio Peccei Twenty Years after his Passing and the Continuing Relevance of his Anticipatory Vision: 2004 Aurelio Peccei Lecture Rome, 23 November 2004” http://www.clubofrome.org/archive/publications/AURELIO_PECCEI_-MASINI_LECTURE.pdf, (accessed 5 October 2005), p.7.

³⁵ Masini, “The Legacy,” p.7.

art of management, a common-sense soundness of judgement – yes, and even that grain of folly necessary to stake one’s reputation on a search for the future.”³⁶

The Canadian COR members encountered in this study, including Senator Maurice Lamontagne, civil servant Rennie Whitehead, academic Ranjit Kumar, and former *Globe & Mail* publisher Roy Megarry shared Peccei’s concerns and were drawn to participate in his grand endeavour. As shown in the subsequent chapters, COR members also tended to share an apparently paradoxical characteristic of being at some point high ranking members of large bureaucracies while simultaneously resenting the ponderous nature of bureaucratic decision making. It was a paradox that also applied to Prime Minister Pierre Trudeau and his Principal Secretary, Michael Pitfield. Common concerns about bureaucracies acted as an intellectual link that was an important part of the conditions that enabled the Club of Rome to become an influential presence in Canada. Like-mindedness with Trudeau was also critical to Pitfield’s advancement through the civil service. Pitfield first joined the civil service in 1959 and joined the influential Privy Council Office (PCO) in 1965. However, under Trudeau he catapulted to the pinnacle of bureaucratic power when Trudeau appointed him Clerk of the PCO in 1975; at 38 Pitfield became the youngest mandarin to ever reach that position.³⁷

At the epicentre of the COR/CACOR-Canada relationship were two singular and deeply intellectual iconoclasts who were also philosopher kings and idea patrons. Both Peccei and Trudeau shared a common concern about the future of humanity and desired to challenge established structures. Trudeau’s iconoclastic tendencies were evident through his efforts to overturn traditional approaches to policy development, and remove

³⁶ Masini, “The Legacy,” p.7.

Peccei, *The Chasm*, p.258.

³⁷ McCall –Newman, *Grits*, pp.187-189, 395-397.

the spectre of sentiment from policy considerations. As Canadian Justice Minister under Lester Pearson, he led the movement to remove the state from the bedrooms of the nation by legalizing homosexuality. Although a devout Catholic, he also led the way for legalized abortions. In addition, during the 1970 October Crisis, he enacted the draconian War Measures Act and, when asked how far he would go, uttered his famous phrase “Just watch me.”³⁸ Commentators Stephen Clarkson and Christina McCall argued that the period from 1974 to 1979 witnessed Trudeau reverting to “his philosopher-king grandiosities.”³⁹

In a similar direct fashion Peccei, the academic and multinational industrialist sought to challenge both existing political philosophy and already-accepted policy frameworks. Through his writings, and through the COR organization he led, he challenged accepted notions about the intrinsic necessity and inherently beneficial results of economic growth. At one point in his career, Peccei said he felt fortunate that heretics, like him, were no longer burned at the stake.⁴⁰

Trudeau and Peccei: Idea Patrons and Their Organizations

Trudeau and Peccei were idea patrons in that they successfully attracted others with similar socio-political views to themselves and helped to influence the operations of the organizations they headed. Trudeau, Peccei and the people who became close associates held views regarding the primacy of reason and holistic thinking in policy development. They also tended to be cognizant of the dangers inherent in the excesses of the operations of the unfettered market-based economics. Thus Trudeau became an idea

³⁸ Catherine Annau (producer), *Just Watch Me: Trudeau and the '70's Generation*, (Montreal: National Film Board of Canada, 1999).

³⁹ Clarkson and McCall, *Volume 1*, p.136.

⁴⁰ Aurelio Peccei, *The Human Quality*, (Oxford: Pergamon Press, 1977), pp.84-85.

patron for the amorphous notion of the Just Society. Pecci became an idea patron for the hopelessly complex notion of the Problematique – the vast collection of interrelated ills including: threat of nuclear war, youth protests, environmental deterioration, overpopulation, resource shortages and the technology divide between Europe and America.

In this dissertation, Peccei and Trudeau appear akin to characters from Book V of Plato's *Republic* because both men were philosophers in terms of being "*lovers of wisdom*."⁴¹ Plato's line "the philosopher, the wisdom-lover, desires wisdom so, not merely parts but the whole," applied to Peccei and Trudeau as they quested for greater understanding of the political and ecological world as a unified whole in order to implement greater governance. As described in this study it was a desire that led to a mutual interest in systems analysis and a mutual desire to see the development of rational holistic and long-range policy development.

Peccei, like Socrates, felt that political leaders had to seek knowledge and wisdom in order to enact effective governance. Meanwhile the coming to power of Trudeau represented a Platonic ideal where "political power and intellectual wisdom" were combined in the leader of the state. Even Trudeau associates such as Allan MacEachan and Herb Gray referred to Trudeau as the "Philosopher King," especially during his first term in office from 1968 to 1972.⁴² Peccei advocated a greater use of holistic long-range thinking in policy development but lacked any real political power to implement such

⁴¹ Italics in the original quote.

Eric H. Warmington and Philip G. Rouse, "The Republic Summary," in W.H.D. Rouse, Eric H. Warmington and Philip G. Rouse, (translator and editors), *Great Dialogues of Plato*, (New York: Mentor, 1984), p.121.

⁴² Plato, "The Republic," in Rouse et al. *Great Dialogues*, p.273.

MacEachan Interview.

Gray Interview.

thinking as the basis upon which policy decision-making was made. As the elected leader of a country, Trudeau, had the resources, time and legitimacy to implement substratum level changes in the approach taken to policy development.

Some of the key concrete outcomes of Trudeau's commitment to greater rational holistic long-range thinking for policy development are addressed in this work. For example, key changes were made to the decision-making operations of cabinet and the Ministry of State for Science and Technology (MOSST) was formed. In addition, the Institute for Research on Public Policy (IRPP) was ordered by Trudeau and his Privy Council Office to take on responsibility for supporting futures research and organizing a national conference to facilitate the creation of a futures association in Canada.

As hinted above, as idea patrons, Trudeau and Peccei had the convictions but mainly relied upon others and the organizations they headed to devise ways of making the ideas become lasting realities. This led Trudeau to associate with similar-minded confidants, such as external affairs advisor Ivan Head, Clerk of the Privy Council Michael Pitfield and ministers in his cabinet such as Marc Lalonde and Allastair Gillespie.

Meanwhile, as mentioned above, Peccei sought like-minded individuals, such as British scientist Alexander King, to join him. Ivan Head remarked in February 2005 that Peccei and King made a fascinating and effective team. Peccei was "the salesman;" the exuberant charismatic ideas-man with a passionate gift to motivate others to his cause. Meanwhile as the Science Director for the Organization for Economic Cooperation and

Development (OECD), King appeared to be grounded and the one who brought a strong “sense of legitimacy” to COR activities.⁴³

Organizational support also became important to Trudeau and Peccei as a means of furthering their ideas. Individuals such as Pitfield and Lalonde worked within the organization that Trudeau headed – the Government of Canada – to encourage, suggest, cajole, and force changes in the policy-making machinery. Changes were meant to have the decision-making process largely conform to Trudeau’s vision – a vision they by-and-large shared. Chapters four and six delve into efforts to bring a rational approach to policy development to the civil service during the Trudeau era.

Similarly, Peccei used the COR to attract other renowned intellectuals, Nobel Prize winners, and other individuals of influence to his cause. It was from the meeting of minds that the COR emerged to challenge the decision makers of the world to treat global problems seriously and to adopt a new holistic and long-range view in developing public policy. COR members tended to view the organization as a catalyst for change and the spreading of ideas.

One of the drawbacks to Trudeau and Peccei’s leadership as idea patrons was that neither paid attention to thoughts of succession. It seems that the two men were sufficiently engrossed in the immediate concerns of furthering interest in their ideas that they lacked the commitment to groom others to take their place. Ironically, the future of their organizations after their leadership roles ended did not appear on their radar screens. The Liberal Party’s fortunes after Trudeau stepped down in 1984 are only given cursory attention in this work. The Trudeau story is told here, in part, due to it being related in existing secondary literature. Commentators such as Lawrence Martin and Greg Weston

⁴³ Ivan Head, Conversation with Author, February 2005. (Hereafter Head Interview.)

provide a more detailed analysis of the aftermath for the Liberal Party of Trudeau's retirement.⁴⁴ That literature makes it obvious that Trudeau did not spend much, if any, time dealing with questions related to the Liberal Party after his sixteen-year reign as leader ended. As a result John Turner returned from a long hiatus from politics, only to lead the party to a crushing defeat in the subsequent federal election.

In lieu of a discussion on Canada's Liberal Party, this work focuses on the consequences of Peccei's lack of attention to succession. The consequences for the COR, and the CACOR, of Peccei's unexpected death in March 1984 are related in chapter six. It is a story of organizational disarray caused largely by the lack of a groomed successor to Peccei. It was an oversight on Peccei's part that nearly tore his COR asunder.

Idea Practitioners and the Spread of Influence

While not grooming successors, Trudeau and Peccei did rely upon others in their quest to spread and implement their ideas concerning policy development and world affairs. The ones they relied upon became idea practitioners who used their positions of influence to spread and implement the core ideas of the heads of their organization. Trudeau's main idea practitioner was Michael Pitfield, who was mentioned above and whose story is related in chapters two, four and six. This dissertation also focuses on COR idea practitioners such as Maurice Lamontagne, Roy Megarry and Ken Hammond. Academics Thomas H. Davenport, Laurence Prusak and H. James Wilson argue that provided with the right circumstances and sense of determination, it is possible for individuals to use the power of ideas to exert an influence within organizations and

⁴⁴ Lawrence Martin, *Chretien Volume 1: The Will to Win*, (Toronto: Lester Publishing Limited, 1995), pp.340-347.

Greg Weston, *Reign of Error: The Inside Story of John Turner's Troubled Leadership*, (Toronto: McGraw-Hill Ryerson, 1988), pp.2-5, pp.13-14 and pp.31-34.

beyond. Idea practitioners tended to be deeply committed to an idea, not necessarily of their own creation, and to network and popularize the idea in a variety of situations to effect change. The writers add that idea practitioners tended to be active in multiple fields and thus able to spread their support of specific ideas to a variety of audiences.⁴⁵

Fitting Davenport, Prusak and Wilson's definition, of idea practitioners as "the link between ideas and action" was one-time cabinet minister, Senator, and academic Maurice Lamontagne.⁴⁶ Chapter four discusses his efforts to institutionalize futures studies in Canada. He first mentioned the idea at the 1960 Thinkers Conference in Kingston and brought it to fruition as a cabinet minister in Lester B. Pearson's government. That effort proved to be disappointing, but Lamontagne soldiered on and chapters four and five relate how his efforts led directly and indirectly to a number of systems-imbued organizations such as MOSST and the Canadian Association of Future Studies. Other key Canadian idea practitioners were Roy Megarry and Kenneth Hammond, who used their business acumen and connections to spread interest and develop initiatives related to the Problematique.

COR as a Catalyst Organization

The idea practitioners discussed in this dissertation were able to use their reputations and connections and/or financial resources to facilitate change. COR members with strong scientific and engineering backgrounds, such as Alexander King and Rennie Whitehead, viewed the instigation of projects as a key part of the COR's role and drew the analogy to chemistry to explain the organization's purpose. COR members

⁴⁵ Thomas H. Davenport, Laurence Prusak and H. James Wilson, *What's the Big Idea?: Creating and Capitalizing on the Best Management Thinking*, (Boston: Harvard Business School Press, 2003), pp.21-22, pp.27-29 and p.66.

⁴⁶ Davenport, Prusak and Wilson, *What's the Big Idea?*, p.21.

described their group as a catalytic organization. In chemistry, a catalyst is defined as “a substance that accelerates a chemical reaction without itself undergoing any net change.”⁴⁷

This dissertation suggests that the COR was a catalyst organization in two senses of the term. Chapters three through five illustrate how the group was a catalyst in terms of providing the impetus to further action. As mentioned, the COR lacked funding and research capacity, but it used the connections of its members to secure funding for various projects. For example, Eduard Pestel arranged for the Volkswagen Foundation to fund the study led by Dennis Meadows that resulted in *The Limits to Growth*. Within Canada, Thomas de Fayer convinced his Department of the Environment to cover a substantial portion of the costs of the *Global 2000: Implications for Canada* and the *Canada 2000* reports. Had it not been for the actions and connections of COR members, it does not appear likely that the research projects would have ever transpired.

The COR, especially in the years following the release in 1972 of *The Limits to Growth*, became a catalyst in accelerating a debate on growth and the global future before the full consequences of projected trends became reality. In chemistry a catalytic agent speeds up and assists processes that left alone would have occurred, but over a longer time frame, and would have exhibited greater dissonance. Biochemist Geoffrey Zubay’s discussion of catalytic enzymes has relevant elements to a discussion of the COR. Zubay said “An enzyme, or any catalyst, for that matter, affects only the speed with which a reaction approaches equilibrium.”⁴⁸ The Meadows’ team and COR members such as Peccei and King, believed that the world was a closed system that strove for

⁴⁷ Geoffrey Zubay, *Biochemistry Third Edition: Volume I Energy, Cells and Catalysis*, (Dubuque: Wm. C. Brown Publishers, 1993), p.199, pp.204-205.

⁴⁸ Zubay, *Biochemistry*, p.204.

balance and a state of equilibrium. Over population, resource depletion, pollution, ecological exhaustion could be sustained for some time, but at some future point the earth's finite reality would cause a crash leading to a new state of equilibrium.⁴⁹ For Zubay and for the COR, the idea of equilibrium was fact and the role of catalytic agents was not to alter the basic fact but to affect how the eventual end point was reached.

The figure below is adapted from Zubay's description of the catalytic role played by an enzyme in a biochemical reaction. It follows the identical progression pattern, but the reference points and axes have been altered to reflect the COR's goals. The Y-axis depicts the amount of disruption in the global system. The X-axis depicts an approximate time line for events. While the COR was more concerned with process, years are inserted for the sake of clarity and are based upon projections presented in the 1972 publication of *The Limits to Growth*. Using the idea of 100 years, the second point is approximately a century after *Limits'* initial publication with the variance provided in the report.

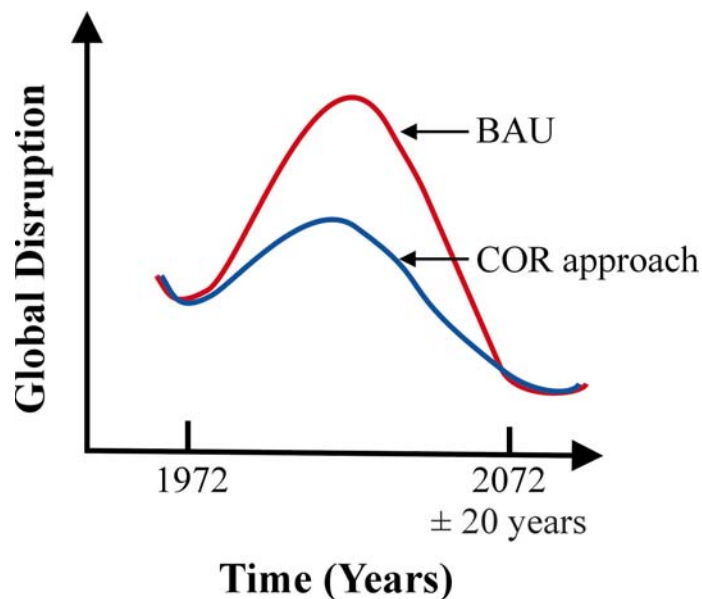


Figure 1: Contrasting Roads to Global Equilibrium –
Adapted from Zubay, *Biochemistry*, 1993, p.205.

⁴⁹ Meadows, *Limits*, p.

If humanity continued with established behaviours in a business as usual approach (BAU), then the descent to the equilibrium state – circa 2072 – would be sudden and, most likely chaotic. In contrast, if the COR approach was taken with early anticipatory action, then preparations would be early and the descent to circa 2072 would be far less dramatic and, presumably, more controlled. According to the COR, two roads diverged for humanity and the COR hoped to convince world leaders to take the more problematic, and less likely to be travelled, one. Doing so would make all the difference to future generations.

Alexander King once said that the role of the Club of Rome was to act as a straight pin and to jab the sides of the established body politic on occasion “to make it jump a bit.”⁵⁰ King’s comments reflect the desire to convince global leaders of the need to guide society into the future and to control the consequences of growth on a finite planet. The alternative was to have nature impose consequences of reaching the limits to growth on a finite planet.

The COR, NGOs and Policy Influence

Peccei used COR as a catalyst organization in laying the groundwork and starting processes that enabled research projects and organizations to come into being. The COR’s job was to initiate and not to maintain or prolong initiatives. Peccei’s informal organization was set up in such a way that it could not do anything more, as an organization, than be catalytic. The COR hardly resembled any conventional populist-

⁵⁰ Alexander King, *The Great Transition: Speech Delivered to the Sandford Fleming Foundation 5 June 1987*, (Waterloo: Sandford Fleming Foundation, University of Waterloo, 1987).

based non-government organization or think tank. The COR lacked any budget; it lacked any direct research capacity; and it lacked any location or administrative structures beyond Peccei's personal office and secretaries at Fiat. Furthermore membership was capped at a maximum of 100 personally invited members. The light-structure was meant to ensure that the COR never became beholden to any outside organization, especially governments. Peccei considered autonomy essential above all else.

Unfortunately time and focus has precluded an in-depth analysis of the role of non-governmental organizations (NGOs) in this dissertation.⁵¹ A comparison study of COR and conventional NGO means, ends and effectiveness would make a fascinating study; however it will have to form the basis of another research project.

COR/CACOR shared similarities with NGOs because they were active political participants, but Peccei and the COR tended to want to influence how decision-makers thought about approaching policy, rather than joining the policy process part way through. Broad thinking environmental NGOs, such as the World Wildlife Fund, may have desired to imbue a greater sense of environmental awareness in the development of policy, but their interest is still fundamentally the environment. In contrast, the COR

⁵¹ Dr. Andrew Thompson has correctly pointed out that not all NGOs are populist based and some, such as Human Rights Watch (HRW) enjoy similar autonomy and behind the scenes high-level contacts as enjoyed by COR. Thompson explained that the difference between the populist-based Amnesty International (AI) and HRW was funding and organizational make up. The former is based primarily on open memberships with the general public. In contrast, HRW is predominantly foundation funded and made up exclusively of professional staff. The web link below provides a better explanation of the contrast between HRW and AI.

While intriguing studies could be conducted between COR and groups such as HRW, it is beyond the scope of this dissertation to compare and contrast the COR's influence with other similar organizations currently in operation. However, this dissertation could potentially be used as a subsequent basis for such a comparative study. This dissertation draws attention to populist-based NGOs due to the stark contrasts in operations. By the end of the dissertation the contrast of COR with mainstream NGO's illustrates how the informal, closed and well-connected nature of the COR which was a strength during its first decade and a half or so of operations, quickly became a detriment to the organizations' future and ultimate influence in Canada and beyond.

Andrew Thompson, Conversation with Author November 2005.

Human Rights Watch, "How is Human Rights Watch different from Amnesty International?" *About HRW*, <http://www.hrw.org/about/faq/#4>, (accessed 27 November 2005).

sought to influence the base upon which policies affecting all policy categories — environment, economics, science and technology, international development and other areas of concern — were built. The COR was concerned with the guiding principles underlying the policy development framework. Its ultimate concern was nothing less than the future of humanity. The COR's aims were grandiose, theoretical, non-specific, not politically feasible (especially in democracies), and/ or often counterintuitive and running against accepted political and economic conventions. What separated the COR from more conventional NGOs, in large part, led the organization to fall from influence in Canada and beyond after the unexpected death of Aurelio Pecei. That is a story told in chapter six.

The Parallel Destinies

The destinies of both Trudeau's government and the Club of Rome show remarkable parallels. They were both products of their times. Trudeau's time in power and the COR's tenets also provide interesting mirrors to witness how culture and politics around them changed, but how they remained steadfast in their opinions. To a large extent, by the end of this dissertation both Trudeau and the COR in Canada were marginalized. The chronologies of Trudeau and the COR's history from 1968 to circa 1984 outlined below illustrate the point. Introducing the sketch are passages from a telling set of letters that the Prime Minister sent to a close member of his cabinet.

Nearing Christmas in 1976, Prime Minister Pierre Trudeau wrote to his Minister of Energy, Mines and Resources, Alastair Gillespie to express his fervent opinion that:

One of the most difficult tasks facing us as Members of Parliament is that of keeping our eyes, and those of Canadians, on the future. Not the future of tomorrow or next year, but the period ten or more years ahead; the closing years of this century which will be shaped in considerable measure

by the decisions we take now. If we yield to the temptation of concentrating on today, we will default our major responsibility to our children and to hundreds of millions elsewhere in the world who look to Canada with trust and who hope that we will contribute to a stable and just world order.... We are in the early phase of a fluid and often-turbulent period of world history. We must not lose our nerve, and we must not under-estimate the weight and potential effect of Canadian participation and contribution. We can shape the changes that face us; we can influence the future that awaits us.⁵²

In February 1978, Trudeau wrote to Gillespie again. In part, the letter stated:

The world is indeed a finite tightly-bound, whole. Events anywhere on earth can-and often do- affect individual Canadians. As parliamentarians, our anticipation of those events, and our response to them, is as important as anything we do. Should we abandon that responsibility, we forsake the opportunity to contribute to a preferred future not only for our own constituents but for all mankind.⁵³

The letters express a number of key sentiments that were not only shared between the Prime Minister and his Minister, but were also echoed by COR founder Aurelio Peccei who wrote:

everything is connected to everything else: causes, problems and solutions are all interlinked in one great continuum. If we want to guide ourselves sensibly into the future, we must consider the entire dynamic picture of the globality of things, not merely examine some of its aspects in isolation.⁵⁴

It was this commonality of concern and purpose that would lead the COR and its subsequent Canadian Association (CACOR) to have an influential presence within Canadian public policy making structures from 1968 until the end of the Trudeau era in 1984.

⁵² P. E. Trudeau, "Letter to Alastair Gillespie 22 December 1976," (NAC: R1526 Alastair Gillespie Papers, Volume 306 File 150-1 Prime Minister), p.1, p.5.

⁵³ P. E. Trudeau, "Letter to Alastair Gillespie 16 February 1978," (NAC: R1526 Alastair Gillespie Papers, Volume 306 File 150-1 Prime Minister), p.1

⁵⁴ Aurelio Peccei, Daiku Ikeda, (edited by Richard L. Gage), *Before It Is Too Late*, (Tokyo: Kodansha International Ltd., 1984), p.14.

The above-mentioned letters were also written at a pivotal time during Trudeau's reign as Prime Minister. Trudeau had swept into power in 1968 on a tidal wave of populist optimism about their Prime Minister-elect and their country's future. However, when Trudeau wrote to Gillespie, the age of optimism was on the wane. Trudeaumania (a term used by the press to capture the Canadian public's enthusiasm and almost blind devotion for Trudeau) was effectively dead by 1972, leaving the Liberals barely clinging to power. Through shrewd political manoeuvres the Liberals were able to regain a majority in 1974; they would lose power completely in 1979, although for only a brief period.

Meanwhile, the 1973 world Energy Crisis and the rise of the Parti-Québécois cast a sobering pall over Canadians' optimism regarding the future. That pall persisted throughout the 1970s and led to greater stresses and strains being felt in the early years of the 1980s when matters were exacerbated by a prolonged recession.

In addition to Canadian domestic politics, the mid-to-late 1970s witnessed a political transformation in approaches to public policy development that recoiled against the Trudeau Liberals' approach to public policy development. In lieu of an activist state in the Keynesian tradition of governance, a new ideology, commonly referred to as neo-conservatism, emerged. It was dedicated to retrenching the state and allowing the operations of the free market to be the arbitrator of public policy directions. By the time Trudeau left office in 1984, the optimism that the Canadian people had held in 1968 had vanished and the country was on the verge of taking *A Hard Right Turn* as it followed the

British and American leads into devoting the country's future to the whims of the operations of the free market system.⁵⁵

Meanwhile, the Club of Rome experienced a parallel progression. It formed in 1968 with its members having great optimism about humanity's ability to shape its future. In 1972, the group sponsored *The Limits to Growth* study out of the Massachusetts Institute of Technology (MIT) that brought them phenomenal international notoriety, but ultimately saddled the organization with the dual erroneous tags of being "doomsday pessimists" and "zero-growth" advocates.⁵⁶ Despite ongoing controversy and the 1973 Energy Crisis, the group continued to have influence in Canada and elsewhere throughout the 1970s and early 1980s. However, the neo-conservative movement was gaining strength. This devotion to market forces and unfettered economic growth was antithetical to the COR. By the time COR's founder and undisputed intellectual, charismatic and financial leader Aurelio Peccei, died in 1984, the group's optimism of 1968 had largely vanished and the association was in danger of being torn asunder.

The End of the Beginning

Both the popularity of the Club of Rome and the rise of Trudeau were integrally linked to the time in which they emerged. Consequently, the first two chapters examine the overall cultural and political settings on the international and domestic scenes that coloured the age at the start of this dissertation. Having established the broad context, chapter three provides an overview of the history of systems analysis and its perceived

⁵⁵ Jeffrey Brooke, *Hard Right Turn: The New Face of Neo-conservatism in Canada*, (Toronto : HarperCollins, 1999.)

⁵⁶ Alexander King, "Club of Rome and Canada Questions," (Correspondence with Author, 28 January 2004).

policy development potentials to answer why both Trudeau's policy makers and the COR were drawn to the discipline.

Following an explanation of why synergies emerged, chapter four provides a discussion of the influence of COR/ CACOR individuals and systems ideas within the horizontal axis of Canada's central policy institutions both established and novel. This is followed in the fifth chapter by a discussion of how the COR members, through advocating systems analysis, were able to influence institutional developments outside of Canada's formal public-policy-making structures. Both the chapters illustrate that often the COR/ CACOR successfully catalyzed initiatives that had cascading effects leading to the further spreading of systems ideas and the establishment of new system-minded organizations.

The last chapter deals with the cultural and political settings that led to a waning of influence for COR/CACOR during Trudeau's twilight years in office. Both the external and internal challenges that by 1988 left the COR and the CACOR bereft of substantial political influence in Canada and struggling to survive will be discussed. The frustrations discussed in this dissertation reflect a coming-of-age of Canadian and international society. It begins at a time of great optimism and a strong belief in both the future and the ability to "change the world". The dissertation ends during a period of economic recession and growing political cynicism.

This dissertation provides a multifaceted snapshot of an interesting transitory period in Canadian and global political thought regarding approaches to policy development. The twenty-year period illustrates how ideas, political will, and human synergy can change the direction of government. The Limits to Influence also illustrates

the dichotomous nature of informally based influences on policy. The Club of Rome and its Canadian Association discovered both the opportunities and perils for organizations relying predominantly upon personal networks to influence public policy development at the national and international levels. The dissertation weaves a narrative that oscillates between the international and national stages. It also traces an idea, systems analysis based public policy development, from its origins, to its being adopted as salient and valuable to individuals and organization, to it forming a critical part of the philosophy of policy in the Canadian government and beyond. The narrative commences in the 1960s, the decade of love, protest and growing ecological awareness and, above all, change.

Chapter 1: The Antecedents to Influence (Part 1) – The International Stage to 1972

In the decade before the publication of *The Limits to Growth* in 1972, to borrow a phrase from astrology, the planets began to align themselves, for the emergence of the Club of Rome (COR) and its ambitious agenda.¹ This chapter deals with events and issues in the international arena before turning attention to the domestic Canadian scene in the next chapter. While this dissertation nominally begins in 1968, it is essential to examine the period leading up to that year in order to understand the context that led to the COR's formation. It is not likely that COR would have evolved into an influential organization had it not been preceded by biologist Rachel Carson and the emergence of the modern ecological movement. Nor would the COR have likely gained global prominence had it not reflected the hopes and concerns of a generation of individuals. The COR reflected broader societal concerns related to the transformative, and often negative, impacts of science, as well as reflecting concerns over widespread political protests and disillusionment with politics in general, especially among youth. The group also reflected a concern that through its technological edge the United States would mould geopolitics such that it resided at the apex of power in a unipolar world.

Rachel Carson and the Interconnected Biological World

The 1960s was a period of growing ecological awareness that led to a questioning of the reciprocal relationships between humanity and the physical environment. The spirit of inquiry and concern applied to both scientific practitioners and, increasingly, the general public. Such awareness was in large part due to the efforts of biologist Rachel

¹ Donella H Meadows, Dennis L. Meadows, Jorgen Randers, and William W. Behrens III, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, (Washington: Potomac Associates, 1972).

Carson who in 1962 published her seminal work *Silent Spring*. The book laid the populist foundations for the emergence of the modern environmental movement. Former American Vice President Al Gore commented that *Silent Spring* offered “undeniable proof that the power of an idea can be far more powerful than the power of politicians.” He added that without Carson’s book “the environmental movement might have been long delayed or never have developed at all.”²

Silent Spring was able to gain and maintain a substantial audience because it was a passionately written and extensively researched book that presented complex scientific arguments in a manner that was accessible to both lay and technical readers alike. Canadian scientist Mark Winston explains that *Silent Spring* “was not a complicated book.”³ It presented two basic arguments. First, Carson argued that ultimately chemical pesticides had the potential to be dangerous to humans, both present and future generations, as well as to insects, fish, birds and other animals.⁴ Her second argument was that if alternatives were available, they ought to be studied and where possible, implemented. She was not against the use of pesticides to control problems, but rather against the use of pesticides as a first resort and against the blanket use of pesticides over

² Environmental academics, such as Robert Paehlke, tend to concur with Gore’s assessment of the importance of *Silent Spring* and present Carson as “the founder of environmentalism.” Other academics such as Doug Macdonald and Barry Commoner paid homage to Carson for setting the stage for subsequent environmental debates over the following decades and for illustrating the importance of educating and mobilizing the public to take action to protect the environment.

Al Gore, “Introduction,” in Rachel Carson, *Silent Spring*, (Boston: Houghton Mifflin Company, 1994), p.xv.

Robert Paehlke, “Democracy and Environmentalism: Opening a Door to the Administrative State,” in Robert Paehlke and Douglas Torgerson, (editors), *Managing Leviathan: Environmental Politics and the Administrative State*, Peterborough: Broadview Press Ltd., 1990), p.39.

Doug Macdonald, *The Politics of Pollution: Why Canadians are Failing Their Environment*, (Toronto: McClelland & Stewart Inc., 1991) p.9, p.91.

Barry Commoner, *Closing the Circle: Nature, Man and Technology*, (New York: Alfred A. Knopf, 1971), p.202.

³ Mark L. Winston, *Nature Wars: People vs. Pests*, (Cambridge: Harvard University Press, 1997), p.156.

⁴ See in particular Winston, *Nature Wars*, Chapter 12, “The Human Price”.

large areas. For her, the key was the judicious use of scientific knowledge and research in developing the most effective means of dealing with problems.⁵

That straightforward message was supported by a vast amount of published scientific sources that when presented as a package became a compelling and apocalyptic warning; excessive use of pesticides threatened not only the intended victims, but also other creatures, including humans.⁶ In addition to the strategic use of evidence, *Silent Spring* had an urgent tone that was designed to capture the attention of an extensive spectrum of public opinion. The book often had a folksy yet urgent tenor that presented everyday phenomena as being threatened by the reckless use of pesticides that she evocatively referred to as “Elixirs of Death.”⁷ The most potent elixir was dichloro-diphenyl-trichloro-ethane, otherwise known as DDT. She used it to illustrate how pesticide use can spread into an ecosystem and eventually adversely affect humans both directly and otherwise.⁸ In her descriptions she often used ominous phrases such as “No

⁵ Chapter 10, “Indiscriminately from the Skies,” discusses the counterproductive nature of “blanket spraying” and ends with a discussion Florida’s failed experiments to combat fire ants and how a directed approach targeting “individual mounds” was more cost and result effective. Similarly, in Chapter 15 “Nature Fights Back,” Carson lauded the work of Nova Scotian scientists who addressed an insect problem with the use of natural alternatives in conjunction with the “minimum use of insecticides.” Thirdly, the conclusion, Chapter 17 “The Other Road” is introduced by the plea that in lieu of a chemical solution, “we should look about and see what other course is open to us.”

Activists Barbara Ward and Rene Dubos present Carson’s moderate arguments in the book as part of its populist appeal. Carson’s “warnings were directed not against pesticides as such but against the great sloshing wave of some chlorinated hydrocarbons.”

Carson, *Silent Spring*, pp.171-172, 260 and 278.

Barbara Ward, and Rene Dubos, *Only One Earth: The Care and Maintenance of a Small Planet*, (Harmondsworth: Penguin Books Ltd., 1972), p.107.

⁶ Political scientist Charles Rubin gives an extensive discussion of Carson’s use of published scientific reports to create an impression that scientific opinion constantly supported her arguments. He argues that often the original reports did not consistently support all of Carson’s findings and that she deliberately used the sources that presented her argument “in the most effective and affecting way.”

Carson, *Silent Spring*, pp.301-355.

Charles T. Rubin, *The Green Crusade: Rethinking the Roots of Environmentalism*, (Lanham: Rowman & Littlefield Publishers Inc., 1994), pp.39-44.

⁷ Carson, *Silent Spring*, p.15.

⁸ Carson, *Silent Spring*, pp.18-27, pp.41-42, pp.108-109, pp.131-135, pp.158-60, pp.177-179 and 192-193.

one yet knows what the ultimate consequences may be,” to elicit a concerned response from her readers.⁹

Carson made it clear that she was discussing real, dangerous facts that permeated all of people’s lives and especially affected their long-term health.¹⁰ She further implied that governments were not adequately protecting citizens from the powerful pesticide industry.¹¹ Carson explained how pollution threatened the basic foundations of human survival, especially drinking water, soil, and foliage.¹² Carson then began explain how the overabundance of pesticides in the environment affected individual lives in other ways as well. Attention was also drawn to the impact of pesticide spray programs on farm animals, especially cats that were particularly sensitive to poisoning.¹³ *Silent Spring* also piqued the interest of recreational groups such as bird watchers and sport fishermen. Carson warned about the “sudden silencing of the song of birds,” and the “obliteration of the color and beauty and interest they lend to our world.”¹⁴ Similarly, salmon anglers and other fishermen had to be concerned about the “rivers of death” that were being created by the spraying of pesticides, especially the chief villain DDT.¹⁵

Of most importance to the subsequent COR activities and the reception given to *The Limits to Growth* was the way Carson illustrated “the bewildering degree of

⁹ Carson, *Silent Spring*, p.23.

¹⁰ Carson directly linked pesticide use to numerous health problems associated with the nervous system, genetic abnormalities and with alarming rates of cancer, a disease that took her own life in 1964, two years after *Silent Spring* was published.

Carson, *Silent Spring*, ch.12, ch.13 and ch.14.

PageWise, Inc, *Biography of Rachel Carson* http://www.essortment.com/carsonrachelwh_pid.htm, (accessed 1 October 2003).

¹¹ Carson, *Silent Spring*, p.181.

¹² Carson, *Silent Spring*, ch.4, ch.5 and ch.6.

¹³ Carson, *Silent Spring*, pp.93-94.

¹⁴ Carson, *Silent Spring*, p.103.

¹⁵ Carson, *Silent Spring*, ch.9.

interdependence of natural systems.”¹⁶ The interconnectedness of humanity and the need to appreciate the reciprocal relationship between humanity and the physical environment were prominent messages within COR supported works. The COR argued that to view issues in isolation from the broader environmental, societal and political setting and to make decisions without consideration of interrelated consequences over the long-term was to court disaster. It was a message that built upon Carson’s initial work and expanded the idea of interconnectedness beyond the strictly environmental realm. By the time the first report to the COR appeared in 1972, the scientific idea of an interconnected world had been established at the popular level, at least in the environmental field.

The OECD and the Impact of Science and Technology

At the same time as growing environmental and ecological awareness emerged, concerns were being raised within the Organization for Economic Cooperation and Development (OECD) about the ultimate long-term impacts of scientific and technological advances. In November 1968 in Bellagio, Italy the OCED and the Rockefeller Foundation co-sponsored the invitation only “Working Symposium on Long-Range Forecasting and Planning.” Twenty leading academics and businessmen in the fields of planning and forecasting attended the conference. Included in the list of participants were either existing or future COR members: Dennis Gabor, Erich Jantsch, Alexander King, Aurelio Peccei, Jay Forrester and Rene Dubos.¹⁷ These men played

¹⁶ Ward, and Dubos, *Only One Earth*, p.108.

¹⁷ Erich Jantsch (editor), *Perspectives on Planning: Proceedings of the OECD Working Symposium on Long-Range Forecasting and Planning Bellagio, Italy 27th October – 2nd November 1968*, (NL: Organization for Economic Cooperation and Development, c.1969), p.5, pp.11-12.
Moll, *From Scarcity to Sustainability*, pp.279-291.

important roles within COR and some established relations with the Canadian government. Their stories will be told as the chapters unfold.

The purpose of the symposium was to discuss and formulate a ‘platform for the new planning.’ While disagreements and intense debate prevented the ultimate goal from being accomplished, organizers considered the meeting a success. Substantial progress towards clarification of terms and identifying the problems of planning was made. Participants – many of them renowned scientists and businessmen - signed onto a Bellagio Declaration.¹⁸ The declaration was surprising for its cautioning about the perils of unbridled economic growth and its rejection of science alone as being able to solve the problems of the present and future. The group agreed that economic growth could no longer be considered in isolation from the broader social implications. Similarly, technological advancement should no longer proceed without consideration of the social contexts and consequences.¹⁹

Contained within the declaration was the idea that science had the ability to exacerbate problems. The use of science in planning was stated as having the ability “to make situations which [were] inherently bad, more efficiently bad.”²⁰ The declaration ended with the statement that the individuals present believed that global trends were a major cause of concern and that urgent action was needed “irrespective of political, social and economic ideologies.”²¹ What the Bellagio group was advocating were substratum level examinations of issues and problems. Problem identifications made in isolation

¹⁸ Jantsch, *Perspectives on Planning*, p.13.

¹⁹ Jantsch, *Perspectives on Planning*, p.7.

²⁰ Jantsch, *Perspectives on Planning*, p.8.

²¹ Jantsch, *Perspectives on Planning*, p.9.

often dealt with only “symptoms rather than attack[ing] the basic cause.”²² The COR subsequently accepted as its mission to spread the Bellagio message to the world’s leading policy makers.

NASA Images and a Finite World in an Infinite Space

Carson’s environmental warnings and the concerns emanating from the Bellagio Conference were amplified by the growing realisation of how miniscule and isolated Earth was when compared with the infinity of space. Such impressions were created by the first images of the earth from space in the 1960s. The National Aeronautics and Space Administration (NASA) images depicted “a blue orb in a sea of blackness”.²³ It graphically illustrated the finite properties of earth within an infinite universe. Cultural historian Douglas Miller argued that the poignant image of “the living Earth taken from the dead blackness of space served as a dramatic reminder of the planet’s beauty and fragility.”²⁴ Ecologist Garrett Hardin further observed that the space images were of vital importance in the process of transforming what had been a largely intellectual knowledge of the earth’s place in the universe to being something that people felt. The planet was “A very little thing in an immensity of space. Limited; confined. *A spaceship.* (sic)”²⁵

Using public interest in space images of Earth, activists Barbara Ward and Rene Dubos passionately warned of the ultimate fragility of life on earth and articulated the stark realisation that there were no alternatives to life on the planet. Ward’s first book,

²² Jantsch, *Perspectives on Planning*, p.7.

²³ Douglas T. Miller, *On Our Own: Americans in the Sixties*, (Lexington: D. C. Heath and Company, 1996), p.329.

²⁴ Miller, *On Our Own*, p.329.

²⁵ Garrett Hardin, *Exploring New Ethics for Survival: The Voyage of the Spaceship Beagle*, (New York: The Viking Press, 1972), p.16.

Spaceship Earth graphically argued that political tensions and divisions, especially East-West and North-South, had to be subordinated to greater environmental and cooperative concerns in order to preserve “the majestic yet vulnerable reality of a single planet carrying a single human species through infinite space.”²⁶ Ward’s subsequent book written with Dubos, *Only One Earth: The Care and Maintenance of a Small Planet*, argued that protecting the earth from “degradation and destruction” was essential to the survival of the human species.²⁷

Overpopulation became a major theme in ecological writings from the 1960s. Using the spaceship analogy, there were ever-increasing numbers of passengers that needed to be supported. Publications in the late 1960s and early 1970s including Paul Ehrlich’s *Population Bomb*, Garrett Hardin’s article “Tragedy of the Commons,” Lester Brown’s books *Seeds of Change* and *In the Human Interest* and Barry Commoner’s *Closing the Circle*, collectively painted a dismal picture of a crowded planet struggling to both maintain sufficient levels of foodstuffs to feed its ever growing population and to secure sufficient natural resources to perpetuate economic growth. They further implied that the situation was likely to become increasingly problematic over the subsequent decades.²⁸ In 1972 Commoner proclaimed that the ecosphere was “being driven towards

²⁶ Barbara Ward, *Spaceship Earth*, (New York: Columbia University Press, 1966), p.146.

²⁷ Ward and Dubos wrote: “our single, beautiful and vulnerable Planet Earth...Alone in space, alone in its life-supporting systems, powered by inconceivable energies, mediating them to us through the most delicate adjustments, wayward, unlikely, unpredictable, but nourishing, enlivening and enriching in the largest degree.”

Ward, and Dubos, *Only One Earth*, pp.290-299.

²⁸ Ehrlich argued that in the developing world it was not likely that the ability to produce foodstuffs could keep pace with rapidly growing populations in Latin America, Asia and Africa. Ehrlich commented that with two billion people not getting sufficiently fed in 1968, it was not likely that in the future ample foodstuffs could be secured for the burgeoning populations. Hardin concurred and his 1968 article argued that the population problem was largely intractable and noted that a finite planet could only support a finite population. Environmentalist Brown added the sombre warning in his 1970 work *Seeds of Change* that the advances in agricultural technology during the Green Revolution would provide only temporary assistance

collapse,” that humanity’s increasing numbers and abuse of the plant were coming at a cost and that “payment” could not be avoided “only delayed.”²⁹

Other academics joined the chorus of concerned experts in exploring the implications of a rapidly expanding global population. Biologists Ingrid Waldron and Robert E. Ricklefs acknowledged the multifaceted implications of population growth. In their 1973 book *Environment and Population*, they commented that in addition to basic biological considerations, it was necessary to use supplementary material from such diverse fields as “physics, economics, history, sociology and psychology” in order to find solutions to the problems associated with population growth. They argued that global population increases meant that every thirty-five years the number of people doubled. In a similar fashion to Ehrlich, Hardin, Brown and Commoner, they concluded that the burgeoning population rates had to be curbed because if they were not, in about 540 years the earth would only be able to provide one square yard of land per individual.³⁰

and the only real hope for the future of humanity was that the extra time being bought would suffice to enable “a breakthrough in contraception comparable to the breakthrough in plant breeding.”

Brown’s 1974 work *In the Human Interest* argued that in the 1970s disturbing trends that did not bode well for the future of humanity were emerging. Non-renewable energy resources were showing early signs of becoming in short supply, food demands were exceeding food production, fish catches were levelling off, forest areas were decreasing in size and rising affluence among a small part of the global population was placing increased stress on the resources of the planet. .

Paul Ehrlich, *The Population Bomb*, (New York: Ballantine Books Inc., 1969), p.xi, pp.21-28, pp.36-44 and p.45.

Garrett Hardin, “Appendix B: The Tragedy of the Commons,” in Hardin, *Exploring New Ethics for Survival* pp.251-252. The original article was Garrett Hardin, “The Tragedy of the Commons,” *Science*, (Vol. 162, 1968), pp.1243-1248.

Lester R. Brown, *Seeds of Change: The Green Revolution and Development in the 1970’s*, (New York: Prager Publishers, 1970), p.5.

Lester R. Brown, *In the Human Interest: A Strategy to Stabilize World Population*, (New York: W. W. Norton & Company, Inc., 1974), pp.14-16, p.28.

²⁹ Commoner, *Closing the Circle*, pp.6-10 and p.46.

³⁰ Ingrid Waldron and Robert E. Ricklefs, *Environment and Population: Problems and Solutions*, (New York: Holt, Rinehart and Winston, Inc., 1973), p.iii, p.5.

Lester B. Pearson, Marshall McLuhan and the Interconnected World

The photos of Earth from space presented a powerful and stirring image whose potential was not lost upon former Canadian Prime Minister Lester Pearson. He claimed that the images went beyond influencing people's attitudes toward the environment; it also affected how people came to view their fellow planet-dwellers. Pearson claimed there was "a new and growing awareness that we belong to a world community, an awareness given a new impetus by our move into outer space."³¹ In addition to the visual images from space, the intellectual basis for the idea of global oneness emerged in the 1960s through the efforts of media guru Marshall McLuhan who coined the term "global village" early in the decade. By comparing new forms of mass communications to tribal drums, he argued that humanity was "retribalizing." People were living in an age of near instant awareness of global affairs – "everybody [got] the message all the time," through media, predominantly television that utilised more sensory organs than the traditional print media.³²

One of the consequences of living in the global village was an increasing awareness of the plight of people living in lesser-developed nations and the challenges they faced. Lesser-developed nations were collectively referred to as the "South" or the "Third World" to differentiate them from the developed and more prosperous countries of the "North". Pearson explained that the dividing line between the developed and lesser-developed nations circa 1970 was \$500 per capita and that borderline cases tended to be difficult to categorize. He went on to state that most of the countries in Asia, Africa and

³¹ Lester B. Pearson, *The Crisis of Development*, (New York: Praeger Publishers, 1970), pp.32-33.

³² Marshall McLuhan, "World is a Global Village: Interview by Alan Millar, 18 May 1960," on *Explorations: Teenager*, CBC Television Archives Online, http://archives.cbc.ca/IDC-1-69-342-1814/life_society/mcluhan/clip2, (accessed 12 July 2005).

Mark Kurlansky, *1968: The Year that Rocked the World*, (New York: Random House, 2005), p.xix.

Latin America tended to be less developed and that the average per-capita income for Asia's approximate 1.75 billion people was a mere \$100. The low-income nations comprised about two-thirds of the world's population spread over 100 nations.³³

The population pressures discussed above, whose consequences were especially acute in the lesser-developed nations, were exacerbating economic problems. In the late-1960s and early 1970s rapidly rising populations were feared to be threatening the environmental, economic and political stability of the countries of the South. Pearson argued that by extension the operation of the entire international political and economic system was in peril. The former Canadian Prime Minister Pearson cautioned that in the Third World population growth rates had to "be controlled so that it [did] not thwart social and economic progress."³⁴ Similarly, social historian E. A. Wrigley commented in his 1971 book *Population and History*, that for many countries in Africa and Asia, rapidly rising populations threatened economic advances as it became increasingly difficult to raise per capita incomes and to secure requisite levels of capital investment. Raising domestic capital was close to impossible in a country with a majority of the population in poverty as money had to be spent on basic necessities.³⁵

After he retired from Canadian politics, Lester B. Pearson played a critical role in popularizing the debate and the need for action on the part of the world's wealthier nations. His experience as Chairman of the Commission on International Development had resulted in the 1969 *Partners in Development Report* for the World Bank and a subsequent book, *The Crisis of Development*. Both works highlighted the plight of the countries of the south and made an urgent appeal for the wealthy northern countries to

³³ Pearson, *The Crisis of Development*, p.5.

³⁴ Pearson, *The Crisis of Development*, p.102.

³⁵ E. A. Wrigley, *Population and History*, (New York: World University Library, 1971), pp.208-210.

take ameliorative action. Pearson said he approached the issue, not as a qualified expert in fields such as economics but as

a practicing political scientist with some years experience ... [and as] a citizen deeply concerned about the problem of uneven and disjointed world development and the effect on the future of mankind if we fail to solve the problem in a way which will provide for social justice and economic opportunity for all people, and not merely for a rich minority.³⁶

The comprehensive *Partners in Development* report made numerous recommendations aimed at developing “a durable and constructive relationship between developing and developed nations in a new and interdependent world community.”³⁷ The report emphasised the fact that it was evident that the world had become a “world community” and that “moral obligations” combined with “enlightened and constructive self-interest” dictated action be taken to improve the plight of less developed and developing nations.³⁸ The theme of the implications of global problems and the need for a holistic approach to deal with a plethora of problems was evident throughout the report. The best-known recommendation from the 1969 report was that developed nations ought to establish, as quickly as possible, the threshold of 0.7% of its Gross National Product as its level of foreign aid. It was strongly suggested that such levels be reached by 1975 and, failing that, “in no case later than 1980.”³⁹

³⁶ Pearson, *The Crisis of Development* p.4.

³⁷ Lester B. Pearson (Chairman), *Partners in Development: Report of the Commission on International Development*, (New York: Prager Publishers 1969), p.22.

³⁸ Pearson, *Partners in Development*, pp.8-9.

³⁹ Pearson, *Partners in Development*, p.152.

“A Riotous Time” in the Global Village and ADELA

In addition to being a time of growing awareness of ecological and development issues, the end of the 1960s and early 1970s was also a time of worldwide unrest. Former Prime Minister Pierre Trudeau described the late 1960s, especially 1968, as being “a riotous time”.⁴⁰ In advanced democracies, communist countries and beyond, people protested, riots broke out, and critical questions were being asked about the established order. In France, Germany, the United States, Mexico, Czechoslovakia, Poland and Canada unrest and tensions dominated the political, cultural and social lives of the each nation. Historians Mark Kurlansky and Robert Paxton argue that 1968 was a singular year that witnessed numerous protest movements united “only in that desire to rebel” and in the “sweeping rejection of society.”⁴¹

The tumult accompanying the end of the 1960s, the growing recognition of the environmental and economic problems of over-population and development created a sense of unease in the co-founder of the Club of Rome, Aurelio Peccei. He was a world citizen who, through travel and various business ventures, had extensive experience in various parts of the world including the Soviet Union, Latin America, Asia and Africa. During the immediate post-WWII era, Peccei embarked on a period of extensive travel around the world visiting underdeveloped nations. The experience instilled a deep sense of empathy with the people of the poorer nations and a resolve to help improve the relative position of the lesser-developed nations in the world. Peccei commented that his

⁴⁰ Rock Demers and Kevin Tierney (Producers), “The Art of Governing 1968-1972,” *Pierre Elliott Trudeau, Memoirs*, (Volume 2: Episode 3), Markham: Les Productions La Fete/ Polygram Video, 1994.

⁴¹ Kurlansky, *1968*, p.xvii.

Robert O. Paxton, *Europe in the Twentieth Century, Third Edition*, (Orlando: Harcourt Brace & Company, 1997), pp.610-615.

travels enabled him “to deepen [his] first-hand knowledge of what underdevelopment really [meant] in the heart of so many regions in Asia, Africa and Latin America.”⁴²

As an executive for the Italian car manufacturer Fiat in the years before the Second World War Peccei worked and lived in the Soviet Union and in China. After the war he was sent to head up operations in Latin America where he lived and worked in Argentina and in 1949 helped to establish Italconsult.⁴³ Peccei was Italconsult’s Managing Director until the late 1960s and successfully brought together Italian industrial and financial interests to form a large construction corporation that sought to specialize in working in developing countries on a non-profit basis.⁴⁴

Meanwhile in 1961, amidst Cold War tensions and rivalries over influencing the development of the Third World, American Senators Jacob K. Javits and Hubert H. Humphrey began to seek international support to “launch a movement or establish a mechanisms to revamp private initiative in Latin America.”⁴⁵ Their search for “apostles” for the idea in the international business community led to Fiat Vice-Chairman Giovanni Agnelli. In turn, Agnelli suggested they contact Aurelio Peccei about joining the

⁴² Peccei was travelling approximately at the same time as future Canadian Prime Minister Pierre Trudeau and their experiences appeared to have had a similar impact on both individuals. Trudeau in his *Memoirs* explained his activism on the part of improving North-South relations were directly the result of his travels in the underdeveloped nations of “South America, Asia and Africa.” That experience had showed him that Canadian “hard times were paradise compared with the hard times of many millions of people on the Third World who saw their children go to be hungry every night and, all too often, die from starvation.” The common experience of witnessing the plight of the Third World and a dedication to help alleviate the inequities of the global system that created the inequities drew the two men together and facilitated a meeting of minds on the issue.

Peccei, *The Human Quality*, p.9.

Pierre Elliott Trudeau, *Memoirs*, (Toronto: McClelland and Stewart Inc., 1993), p.228.

⁴³ Peter Moll, *From Scarcity to Sustainability: Futures Studies and the Environment: the Role of the Club of Rome*, (Frankfurt: Peter Lang, 1991), p.50.

Aurelio Peccei, *The Human Quality*, (Oxford: Pergamon Press, 1977), p.4-5, p.10.

⁴⁴ Peccei, *The Human Quality*, pp.11-12.

⁴⁵ Jacob K. Javits with Rafael Steinberg, *Javits: The Autobiography of a Public Man*, (Boston: Houghton Mifflin Company, 1981), pp.456-457.

Peccei, *The Human Quality*, p.37, p.39.

project.⁴⁶ Peccei accepted the task of being the Executive Director for Europe on the condition that his role was limited “to working out the blueprint for the project and to finding sufficient financial support to launch it.”⁴⁷

With Peccei’s help, Javits’ and Humphrey’s vision became a reality in January 1964 when the Atlantic Development Group for Latin America (ADELA) officially incorporated as a private partnership between European, American and Japanese firms whose efforts were coordinated through the European office of the Organization of American States. It initially had 54 corporate shareholders and an initial capital fund of \$16 million; by 1981 it involved 240 investors and \$61 million in capital and facilitated approximately \$2 billion USD in economic activity in Latin America.⁴⁸ ADELA was a catalyst organization interested in assembling deals to facilitate the start of business ventures that were to be owned and operated by local entrepreneurs. ADELA launched projects and monitored progress and thereby helped to fill the gap left by mainstream foreign investors who were more interested in mega-project style investments. In order to prevent projects from becoming embroiled in the self-interest of the foreign investors, none of ADELA’s 240 supporting businesses had more than one-percent equity.⁴⁹ This

⁴⁶ Javits, *Javits*, pp.456-458.

⁴⁷ Peccei, *The Human Quality*, p.37, p.39.

Javits, *Javits*, p.457.

⁴⁸ J. Rennie Whitehead, “Chapter 13: The Club of Rome,” in *Radar to the Future: The Story of a Boffin*, <http://www3.sympatico.ca/drrennie/chap13.html>, (accessed 8 December 2003), p.3.

Ambassador Christopher R. Thomas, *Address By Ambassador Christopher R. Thomas At The Caribbean Seminar Occasional Series The City College Of The City University Of New York*, 29 April, 1999, <http://www.oas.org/en/pinfo/asg/042999.htm>, (accessed 8 December 2003).

James W. Fox, “The Venture Capital Mirage - Assessing USAID Experience With Equity Investment,” *USAID Program and Operations Assessment Report No. 17: Arlington Center for Development Information and Evaluation, U.S. Agency for International Development, August 1996*, http://www.usaid.gov/pubs/usaid_eval/pdf_docs/pnaby220.pdf, (accessed 1 June 2005).

Peccei, *The Human Quality*, p.41.

Javits, *Javits*, p.458.

⁴⁹ A subsequent US Aid assessment of the program argued that the lack of a dominant shareholder meant ADELA’s large board of directors provided little effective oversight over the company’s management. The

approach of gathering influential concerned actors behind a common cause was an important model for the COR.⁵⁰

Peccei's *The Chasm Ahead* and the Second Industrial Revolution

Extensive business experience in Latin America combined with efforts consulting European businesses on ADELA's behalf and other business ventures profoundly affected Peccei.⁵¹ Despite his efforts to use his business acumen and connections to facilitate development in the Third World, Peccei became convinced that his initial efforts to improve conditions in the developing world were not sufficient. He also came to believe that there were two key emerging perilous cultural, economic, technological and innovative gaps. The first fissure was between the developed and developing worlds – the North-South split. The second fissure was between a staid Europe and an aggressively innovative United States. He began to take his concerns public in the mid-1960s.

report further argued that it was a major contributing factor to the problems experienced by the company in the 1980s that led to its eventual liquidation in 1992.

Javits, *Javits*, p.459.

Peccei, *The Human Quality*, p.41.

Fox, "The Venture Capital Mirage," p.19, p.23.

⁵⁰ Chapter four tells a similar story in the formation of the Foundation for International Training (FIT) in Toronto. Head of Seneca College's Centre for International Programs Ranjit Kumar approached Peccei and Alexander King about using their connections and influence to help him establish a new independent training centre. The centre's purpose was to help train bureaucrats from developing nations who would subsequently return home to further educate other members of their nations bureaucratic bodies.

Ranjit Kumar, Conversation with Author, January 2004. (Hereafter Kumar Interview)

⁵¹ Peccei was also a founder of Alitalia Airlines and in 1964 was recruited to become the Managerial Director and Chief Executive Officer of the then struggling Italian firm Olivetti. In taking the Olivetti position, Peccei demanded permission to maintain his positions at Fiat and Italconsult. Peccei's approach to turning around the company illustrated a general approach to problem solving that would echo in the approach to the formation of the Club of Rome four years later. He revamped Olivetti's operations and believed that "the key to revival was to set new and challenging goals for the company... creating an innovative and imaginative, yet strictly sound, management."

Alitalia, *History*, <http://www.alitalia.com/en/know/profile/history/history.htm> (accessed 2 December, 2003).

Peccei, *The Human Quality*, p.9, pp.12-13.

In September 1965 at the National Military College in Buenos Aires, Argentina Peccei began voicing his concerns about the future. Full of foreboding, the speech reflected his long experience of conducting business operations in Europe and in lesser-developed regions such as Latin America. He began with the statement: “The times in which we live are full of trouble and danger.”⁵² He later expanded on the concerns raised in the Argentinian speech in his 1969 book, *The Chasm Ahead*. Peccei said that book condensed his fears and

hopes about the future – something that no longer belongs to us, but primarily and basically to the coming generations... in it I tried to indicate what we should do so as not to foreclose their possibility of having as wholesome a life as we have been able to enjoy ourselves.⁵³

Taken together, the 1965 speech and *The Chasm Ahead* depict Peccei’s worldview, and his theories related to world politics and the relative fate of nations. Peccei perceived a world that was continually fracturing and headed for conflict and decay if corrective measures were not taken. The key fractures were not being caused by ideological differences between East and West, but rather were being caused as a result of “the second industrial revolution” accompanying the emergence of the computing technology. It was evident to Peccei that the computer revolution had the potential to deepen and widen the quality of life and opportunity chasm between the developed northern nations and the southern developing nations.

Peccei alleged that the North-South divide had been the ultimate result of the first industrial revolution of the seventeenth to nineteenth centuries that started in Britain and

⁵² Aurelio Peccei, “The Challenge of the 1970s for the World of Today: A Basis for Discussion,” in Gunter A. Pauli, *Crusader for the Future: A Portrait of Aurelio Peccei Founder of the Club of Rome*, (Oxford: Pergamon Press, 1987), p.105.

⁵³ Peccei, *The Human Quality*, p.57.

later spread “to a certain number of other countries.” That revolution led to the emergence of a powerful industrialised world and a relatively feeble underdeveloped world that struggled to catch up and, in many cases, to survive. The first industrial revolution augmented humanity’s “capacity for work” but the countries outside of its influence “remained backwards in every way: in social structure, political system, economic standards and, above all, capacity for further progress.”⁵⁴ Whereas the first industrial revolution increased the capacity for physical work, the second industrial revolution through electronics increased the capacity of the human mind. He further added that technological change had the potential to “generate quite incalculable consequences.”⁵⁵ Peccei argued that while there had been United Nations sponsored efforts to ameliorate the problem of a lack of Third World industrial development, little progress had been made and the prospects for the future of the South did not look promising.⁵⁶

Peccei believed the world was on the precipice of a second industrial revolution before it had fully come to terms with the impact of the first. However, the chasm to which Peccei referred in his book *The Chasm Ahead* was not between the developed and the developing world; his biggest concern was the emerging technological gap across the Atlantic between Europe and the United States.⁵⁷ The emergence of computer technology had the potential to cause a catastrophic rift within the developed world and it had the potential to lead to the United States becoming the dominant unassailable power in an unipolar world.

⁵⁴ Peccei, “The Challenge of the 1970s,” p.106.

⁵⁵ Peccei, “The Challenge of the 1970s,” p.107.

⁵⁶ Peccei, “The Challenge of the 1970s,” p.106.

⁵⁷ Peccei, “The Challenge of the 1970s,” p.110.

The United States both drove and rode the crest of the new technological revolution. Massive American research and development programs associated with the military-industrial complex were the engines that drove the second industrial revolution. The US government invested heavily in research and development programs that created an innovative society that was quickly eclipsing similar programs elsewhere in the world, including Europe. Peccei used figures showing the US spending over \$20 billion on research and development, with the US federal government providing approximately 70% of that amount. While most of that amount went into military associated projects, Peccei maintained that there were significant spin-off implications that benefited the broader society. In addition the world's top research workers and scientists were increasingly moving to the United States.⁵⁸ At the vanguard of the American technological assault was the Research and Development Corporation (RAND), which had been involved in developing advanced computer systems and systems technology since the 1950s. While closely tied to the military and strategic thinking, RAND's systems development and planning projects soon began to penetrate the civilian world.⁵⁹

Peccei saw early signs of the consequences of the electronics revolution in 1960s America. He feared that he was witnessing a “precursor of new disequilibria in the already precarious state of the world.”⁶⁰ Relying upon the works of European academic

⁵⁸ Peccei, “The Challenge of the 1970s,” p.112.

⁵⁹ The broader implications of RAND-initiated research were evident in Paul Baran's research into establishing a secure form of communications in the event of a nuclear war and/or attack from enemy forces. Following the Cuban Missile Crisis of 1962, Baran began to develop a secure information system that would operate in the event of a near complete nuclear annihilation and attack by enemy forces. The system he developed began to get used by scientists to exchange information and subsequently in the 1980s and 1990s evolved into the Internet and World Wide Web.

Moll, *From Scarcity to Sustainability*, p.57.

Willis Ware, “Computing” in RAND Corporation, *50th: Project Air Force 1947 to 1996*, <http://www.rand.org/publications/PAFbook.pdf>, (accessed 17 December 2003), p.33-35, p.37.

⁶⁰ Peccei, “The Challenge of the 1970s,” p.107.

Louis Armand, a picture was created of self-perpetuating exponential technological progress. Peccei argued that the unquestioned leader in the process was the United States with other nations either having lesser roles or being relegated to the status of mere spectators.⁶¹ Peccei further postulated that there were significant “multiplier effects” where interconnections and advancements spurred on further technological advancements and developments in an innovative cultural milieu.⁶²

In contrast to the United States, the Soviet Union, together with the Eastern Bloc countries and Western Europe, lacked the organizational and communication infrastructures required to excel in the second industrial revolution. In addition, European companies tended to be significantly smaller and therefore unable to capitalize on “higher profits, greater availability of internal capital, [easy] access to capital markets, superiority in research, opportunity for adopting more advanced development programs, and management techniques, and of organizing more efficient trading and servicing networks, etc.”⁶³

Beyond the individual company level, the fragmented political and economic map of Europe also caused Peccei concern. He said that a fractured Europe was not able to compete on a global level with the United States. The end result was likely to be that “in

⁶¹ Peccei, “The Challenge of the 1970s,” p.111.

⁶² The idea of technological advancement being begotten from technological advancement is a common theme in the writings of individuals examining the future of computers and information technology. Writers such as Ray Kurzweil postulate that within the 21st century technological advances will continue and reach a point called “The Singularity.” At that time “the pace of technological change will be so rapid and its impact so deep that human life will be irreversibly transformed.” Kurzweil predicts that by approximately 2060 computers will have more capacity and power than the total brainpower of the entire human race with profound consequences.

Ray Kurzweil, “Human 2.0,” *New Scientist*, (24 September 2005), pp.32-37.

Vernor Vinge, “The Singularity,” *VISION-21 Symposium: NASA Lewis Research Center and the Ohio Aerospace Institute, 30-31 March 1993*, <http://www.ugcs.caltech.edu/~phoenix/vinge/vinge-sing.html>, Accessed 10 October 2005.

Peccei, “The Challenge of the 1970s,” p.113.

⁶³ Peccei, “The Challenge of the 1970s,” p.114.

the near future the United States alone will be found at the crest of the wave of extraordinary progress being enacted, and will inevitably rise far beyond all other nations, those of Europe included.”⁶⁴ Before the broader problems of the world could be effectively dealt with greater European unity and collective presence in the world was “an absolute prerequisite.” Europe was strategically located as a bridge between the futuristic United States and the parts of the world that lived “partly in the past.”⁶⁵ Peccei further added that a Euro-North American partnership had the potential to “unleash uncommon energy to direct it towards the fundamental objective of extending the area of prosperity to other zones.”⁶⁶ For Peccei, a stronger Europe able to interact with the United States on relatively equal footing was an essential first step to dealing with the broader North-South problems.

“Aurelio Peccei and Friends”: the Emergence of the Club of Rome

It was likely Peccei’s concern about the emergence of an American leviathan that caught the attention of Soviet scientist Dzhermen M. Gvishiani. After reading Peccei’s Buenos Aires speech Gvishiani started a series of events that culminated with the formation of the Club of Rome in 1968. At the time Gvishiani was the Deputy Chairman of the State Committee for Science and Technology and he became interested in both systems analysis and Western management theories.⁶⁷ He wrote extensively on the need

⁶⁴ Peccei, “The Challenge of the 1970s,” p.114.

⁶⁵ Peccei, “The Challenge of the 1970s,” p.117.

⁶⁶ Peccei, “The Challenge of the 1970s,” p.120.

⁶⁷ Gvishiai was married to Soviet reformer Aleksei Kosygin’s daughter. For a time after 1964 Kosygin was Chairman of the Council of Ministers and in effect, second in command in the USSR behind Leonid I. Brezhnev. The marriage, reputation and training provided Gvishiani with considerable influence within Soviet scientific and bureaucratic circles. In his later years he became active within the Mikhail S.Gorbachev administration as the Deputy Chairman of the State Planning Committee.

for Soviet bureaucrats to study and adapt the successful organizational practices of the West. He conceded that while according to Marxist philosophy capitalist theories were fundamentally flawed, they often contained pragmatic approaches to effective large-scale industrial organization. The keys for the advancement of socialist society were to be found in the study of capitalist ideas and then to decipher them with Marxist filters in order to distil the useful elements.⁶⁸

Gvishiani's interest in the ideas of the West put him in contact with the Science Director of the Organization for Economic Cooperation (OECD), Alexander King. He sent King a copy of the article with a request to have a meeting arranged with Peccei.⁶⁹

John H. Miller, "Gvishiani, Dzermen Mikhaylovich," in Archie Brown (editor), *The Soviet Union: A Biographical Dictionary*, (London: Weidenfeld and Nicolson, 1990), p.135.

Archie Brown, "Kosygin, Aleksei Nikolaevich," in Archie Brown (editor), *The Soviet Union: A Biographical Dictionary*, (London: Weidenfeld and Nicolson, 1990), pp.183-185.

John H. Miller, "Email Correspondence with J.L. Churchill," (17 September 2003).

Stephen Fortescue, "Email Correspondence with J. L. Churchill," (23 September 2003).

Stephen Fortescue, "Email Correspondence with J. L. Churchill," (1 October 2003).

⁶⁸ D. Gvishiani, *Organisation and Management: A Sociological Analysis of Western Theories*, (Moscow: Progress Publishers, 1972), pp.379-381.

⁶⁹ Peccei's contact with Gvishiani led to the formation of an unlikely organization given the Cold War tensions at the time. Peccei also was in contact with Americans McGeorge Bundy, former Presidential security advisor to Presidents J. F. Kennedy and L. B. Johnson, and Philip Handler, the President of the National Academy of Sciences. In part due to Gvishiani's and Peccei's efforts in 1972, the International Institute for Applied Systems Analysis (IIASA) was created and began operating in Austria. International lawyer Eleonora Masini described IIASA as "a meeting place for scholars and scientists of different countries that provided a bridging function for the scientific world, producing important studies in different fields, including climate change, energy and agriculture."

In honour of Peccei and his contributions to IIASA, the organization created in 1984 the Peccei Scholarships awarded to outstanding individuals in their Young Scientists Summer Program.

While the IIASA was not formally connected to the COR, it sponsored conferences dealing with global modelling issues and many of its members shared common concerns with the COR. As well, the IIASA was to play an important role in the Club of Rome as some of its members, such as Canadian representatives J. Rennie Whitehead and Michael Kirby, came to play prominent roles within the COR and the CACOR.

Pentti Malaska, "A Rebellion Against Ignorance," in Pentti Malaska and Matti Vapaavouri (editors), *The Club of Rome*, (Turku: Finnish Society for Future Studies, 1984), p.39.

Peccei, *The Human Quality*, pp.50-52.

International Institute for Applied Systems Analysis, *How IIASA Began*, <http://www.iiasa.ac.at/docs/history.html>, (8 December, 2003)

Eleonora Barbieri Masini, "The Legacy of Aurelio Peccei Twenty Years after his Passing and the Continuing Relevance of his Anticipatory Vision, 2004 Aurelio Peccei Lecture Rome, 23 November 2004," http://www.clubofrome.org/archive/publications/AURELIO_PECCEI_MASINI_LECTURE.pdf, (accessed 5 October 2005), pp.4-5.

While King had not previously known of Peccei, a meeting was eventually arranged in 1966. At the meeting King and Peccei almost immediately realized they “were on the same wavelength.”⁷⁰ The two men both believed in a holistic approach to addressing global problems and they shared a deep concern about the future of Europe. King said that in comparison to long-range futures thinking in the United States, through groups like the RAND Corporation, in Europe “there was very little prospective thinking going on.”⁷¹

The Peccei-King partnership formed the critical nucleus that would be expanded with other like-minded individuals from the ranks of the international academic, business and bureaucratic elites to form a loose collection of individuals in the Club of Rome. The individuals were united in their common opinion of the necessity to develop a “clear understanding of the working of the global systems and the organic interdependence of their parts... [as] in nearly all policy formation and administrative actions such interactions [were] largely ignored.”⁷² However the quest to gather like-minded individuals had an inauspicious start.

In 1968 King and Peccei decided to organize a conference of approximately thirty key European intellectuals in Rome to discuss Europe’s relative position in the world system and Europe’s role in the future of the world. In preparation another OECD consultant, Erich Jantsch, prepared a background essay for discussion; it was called “A

IIASA, “The Peccei and the Mikhalevich Scholarship,” http://www.iiasa.ac.at/collections/IIASA_Research/Research/ECS/pre_pat/CD/iiasa_awards_peccei_mikhalevich.html#Dr.%20Aurelio%20Peccei, (accessed 8 December 2003).

⁷⁰ Alexander King, “The Club of Rome: A Case Study of Institutional Innovation,” in Pentti Malaska and Matti Vapaavouri (editors), *The Club of Rome*, (Turku: Finnish Society for Future Studies, 1984), p.4. Peccei, *The Human Quality*, p.63.

⁷¹ King, “The Club of Rome,” p.5.

⁷² Aurelio Peccei and Alexander King, “Commentary,” in Mihajlo Mesarovic and Eduard Pestel, *Mankind at the Turning Point: The Second Report to the Club of Rome*, (New York: E. P. Dutton & Co., Inc., 1974), p.201.

Tentative Framework for Initiating System-wide Planning of World Scope.” Peccei, as he subsequently did on a regular basis, arranged funding for the conference. The meeting was a false start; King described the meeting as “a monumental flop.” He was greatly perturbed that a large part of the discussion failed to deal with the large global system issues but instead focussed on the differences in the English and French definitions of the term “system”.⁷³ Similarly Peccei said that at the end of two days of “peripheral semantic or theological debates,” the participants could not “agree among themselves, not even on a mere prolegomena.”⁷⁴ He further added that Europe’s deep political, cultural and intellectual fissures were evident.⁷⁵

While disappointed in the larger meetings, Pecci and King became convinced of the need to forge a broad-based forum to develop, exchange and debate ideas on the state of the world and its future. Peccei believed that the initial meeting had at least accomplished a common recognition that a growing number of interrelated and understudied complex world problems existed.⁷⁶ Over a meal at Peccei’s apartment in Rome, six individuals decided to form a broader discussion group and the Club of Rome was born and named in honour of the city in which the meeting took place. The six individuals represented a broad-based group of scientific and political interest from Europe. In addition to Peccei and King, Hugo Thiemann was Director of the Batelle Institute of Geneva; Max Konstamm was a Dutch international relations expert who worked with the architect of the European Economic Community, Jean Monet. Also at the meeting was French financial expert Jean Saint-Geours and systems theorist Erich

⁷³ King, “The Club of Rome,” p.5.

⁷⁴ Peccei, *The Human Quality*, p.65.

⁷⁵ Aurelio Peccei, *The Chasm Ahead*, (Toronto: The Macmillan Company, 1969), p.252.

⁷⁶ Peccei, *The Chasm*, p.252.

Jantsch. While not at the meeting, Hungarian winner of the 1971 Nobel Prize for Physics, Dennis Gabor was interested in contributing to the emerging association as well.⁷⁷

There remained dissention within the smaller group about the practicality of examining “problems on a comprehensive global basis.”⁷⁸ There was a split between individuals who advocated a comprehensive approach and others who felt that such an approach was bound to be excessively vague. Despite criticisms, Peccei and King insisted that a holistic approach was essential to dealing with global issues. They reasoned that there were already numerous organizations dealing with specific issues and problems, such as urban planning and the environment, but there was a dearth of interest in a comprehensive study of the interrelations between problems and their interactions. King stated that ultimately his and Peccei’s “position prevailed.” Peccei and King came to dominate the overall direction of the COR and once established the organization began to “co-opt” other individuals into discussions.⁷⁹

After largely informal initial meetings with key individuals such as Austrian Chancellor Josef Klaus, pioneering cyberneticist Hansen Ozberkhan, and professors C. H. Waddington and Eduard Pestel, it was decided to enlarge the group “to formulate its objectives and procedures” and to begin to act. King claimed inspiration from the eighteenth century Lunar Society in Birmingham, England. He credited that organisation’s “mix of outstanding scientists and entrepreneurs, its future orientation and holistic approach” with starting the first industrial revolution that fundamentally altered

⁷⁷ Peccei, *The Human Quality*, pp.65-66.

Whitehead, “Chapter 13: The Club of Rome,” pp.4-5.

King, “The Club of Rome,” p.5.

⁷⁸ King, “The Club of Rome,” p.5.

⁷⁹ King, “The Club of Rome,” p.5.

the course of history.⁸⁰ It was hoped that in the twentieth century their informal group of renowned experts, well-connected bureaucrats and international businessmen could have a similar impact on a global scale.

Peccei and King deeply believed that none of the existing political institutions had the wherewithal and credibility to be a catalyst to start the global debate on the interconnected problems facing humanity; a debate that was likely to become highly controversial.⁸¹ While having great respect for the mandate and activities of the United Nations, Peccei felt that it was too politicised and fractured for the endeavour he had in mind. Its voting procedures and its membership made “it the antithesis of efficiency.”⁸² Meanwhile any US-led initiative would be cynically viewed in some parts of the world. The same applied to any Soviet, Eastern Block or OECD initiative. To be successful what was required was a strictly non-partisan organization whose diverse membership would make it difficult to portray the group as having sinister ulterior motives for delving into global problems and arguing for the need of holistic long-term thinking about the current and future states of humanity.⁸³

⁸⁰ The Lunar Society had a reputation for being revolutionary and as a loose collection of industrialists and intellectuals who laid the foundation for the emergence of the industrial revolution. Its members included industrialist Matthew Boulton, an early innovator of modern factory design, and James Watt whose invention of the steam engine transformed the western world.

Stephanie Pain, “Dear Diary, met Napoleon,” *New Scientist*, (30 April 2005), p.51.

Lunar Society, *The Lunar Society: An Introduction*, <http://www.lunarsociety.org.uk/index.html>, (accessed 4 July 2005).

John H. Lienhard, “No. 1726: The Lunar Society,” *The Engines of Our Ingenuity*, <http://www.uh.edu/admin/engines/epi1726.htm>, (accessed 20 December 2005).

King, “The Club of Rome,” pp.5-6.

⁸¹ Peccei, *The Chasm*, pp.262-266.

Alexander King, “Club of Rome and Canada Questions,” (Correspondence with Author, 28 January 2004).

⁸² Peccei, *The Chasm*, p263.

⁸³ Peccei, *The Chasm*, pp.264-266.

The COR as a Non-governmental Non-organization

After two years of global consultations COR decided to become incorporated in Switzerland in 1970.⁸⁴ Peccei, King and the other initial members decided to strike a balance in membership, to have as geographically and ideologically diverse interdisciplinary membership as possible, while maintaining a maximum number of members at one hundred.⁸⁵ There was so little formal structure to the organization that Peccei referred to it as a “non-organization” and King as “a mobile grouping of individuals.”⁸⁶ The belief was that a formal organization required a bureaucratic structure, financing and ultimately patrons. In contrast, the COR was designed to be a non-partisan catalyst organization, light on its feet and able to network to secure funding for its initiatives. This meant that there were no elected positions, no paid staff and that Peccei became the unquestioned leader and main financial backer of the organization.⁸⁷

Peccei and King fervently believed that the organization “had to live on the leanest budget, in order not to depend even remotely, on any provider of funds.”⁸⁸ Peccei backed his sentiments with his personal fortunes and used a great deal of his own money to support the organization.⁸⁹ Canadian COR member Rennie Whitehead estimated that Peccei contributed upwards of \$200,000 US per year on Club of Rome activities.⁹⁰ Peccei

⁸⁴ King, “The Club of Rome,” p.5.

Whitehead, “Chapter 13: The Club of Rome,” p.8.

⁸⁵ King, “The Club of Rome,” p.6.

⁸⁶ Peccei, *The Human Quality*, p.73.

Alexander King, *Another Kind of Growth: Industrial Society and the Quality of Life*, (Thorney House: Annual Memorial Lecture of The David Davies Memorial Institute of International Studies: 25 October 1972), p.12.

⁸⁷ King, “The Club of Rome,” p.6.

⁸⁸ Peccei, *The Human Quality*, p.73.

⁸⁹ Pauli, *Crusader for the Future*, p.78.

Whitehead, “Chapter 13,” p.13.

⁹⁰ A year after Peccei’s death another Canadian COR member Roy Megarry lamented the fact that COR activities required a minimum budget of \$200,000 and the fact that COR members were not taking fund

also used his personal secretaries at Fiat, Ann Maria Pignocchi and Elena Battistonu, to conduct COR administrative work.⁹¹ He also expected a great deal of personal dedication from other COR members. Peccei biographer Gunter Pauli said that it became a tacit COR rule “that all members of the Club would contribute their time and work free of charge.”⁹²

The “deliberate absence of budget” for the operation of the COR forced the group to network extensively with various organizations and national governments to secure funding for meetings and projects.⁹³ The annual general meetings tended to be sponsored by groups or governments of countries that would invite the COR to hold meetings, provide facilities and often pay travel costs. Various groups sponsoring COR meetings included the French business community, the Dutch Royal Family, the Austrian Chancellor Bruno Kreisky, and the national governments in Canada and Japan.⁹⁴ Peccei’s networking abilities were critical to COR operations and activities.

Peccei’s ability to motivate others, convince them of the rightness of his cause, convince them of the need to use their personal positions of influence to help the COR and further the quest for solutions to the problem facing humanity were astounding. Former *Globe and Mail* publisher Roy Megarry said that when Peccei went to meet with the Kings and Queens of nations or with Presidents and Prime Ministers, he went there to

raising seriously enough threatened the survival of the organization. Peccei’s death created a major funding problem for the organization.

J. R. Whitehead, Conversation with Author October 2004. (Hereafter Whitehead October Interview)

A. Roy Megarry, “Letter to Alexander King, 17 July 1985,” (CACORA: File 300: COR Correspondence – General), pp.3-4.

⁹¹ Pauli, *Crusader for the Future*, p.78.

Whitehead, “Chapter 13,” p.13.

⁹² Peccei, *The Human Quality*, p.77.

Pauli, *Crusader for the Future*, p.78.

⁹³ King, “The Club of Rome,” p.6.

Peccei, *The Human Quality*, p.75

⁹⁴ Pauli, *Crusader for the Future*, pp.80-82.

use them, not in any negative sense but to convince them that their elevated positions enabled them to make contributions to their nations and the world that others could not. Megarry added that more often than not Peccei was successful in gaining help, be it financial, moral or otherwise, from world leaders.⁹⁵

Similarly the Chairman of the Canadian Association for the Club of Rome (CACOR) Ran Ide said that Peccei “was one of the great human beings of the world. I haven’t met anyone with the intelligence, ability, insight, charisma and dedication to compare with his. He was completely selfless.”⁹⁶ Other COR members, such as J. Rennie Whitehead, Ranjit Kumar, Dennis Meadows and Ivan Head said that Peccei was known for his ability to secure funding for major initiatives and COR meetings through the strength of his charisma and intellect.⁹⁷

A similar pattern of catalyzing financial support from national governments and large corporations prevailed for major COR projects. For example, the first major report to the Club of Rome, *The Limits to Growth*, was funded in part by the Volkswagen Corporation. Meanwhile the Canadian government provided approximately \$20,000 in 1971 to host the COR annual general meeting at Montebello in Quebec. The ideas that evolved into *The Limits to Growth* were first discussed by systems analysts Dennis Meadows and Jay Forrester.⁹⁸ The Canadian government also provided \$25,000 for the COR project *Beyond the Age of Waste* by academics Denis Gabor and Umberto

⁹⁵ Roy Megarry, Conversation with Author May 2004.

⁹⁶ - “Aurelio Peccei Industrialist Founded the Club of Rome,” *Globe and Mail*, (15 March 1984), (CACORA: Misc. Clippings).

⁹⁷ Whitehead October Interview
Kumar, Interview.

Ivan Head, Conversation with Author, February 2004. (Hereafter Head Interview)

Dennis Meadows, Conversation with Author, January 2004. (Hereafter Meadows Interview)

⁹⁸ J. Rennie Whitehead, “Early Days,” (CACOR Archives: File 500: “CACOR General Introduction and Information,”) p.14.

Columbo. In 1980 CACOR members were successful in getting the government to sponsor a Canadian version of the *Global 2000 Report* that had been prepared for American President Jimmy Carter by Gerald Barney and Associates.⁹⁹ Meanwhile the Volkswagen Foundation also helped to fund *Mankind at the Turning Point: The Second Report to the Club of Rome*.¹⁰⁰

In addition to the principle of financial independence, the COR insisted it had to remain an organisation that was politically non-partisan. Elected politicians were not eligible for membership.¹⁰¹ In practice for Canada this meant that elected officials such as Prime Minister Trudeau and his elected aide Marc Lalonde were not able to join the organization, but that Maurice Lamontagne, who served in the appointed Canadian Senate, could become an active member.

Individuals recruited to become COR members tended to be personal acquaintances of, initially the executive, and subsequently of existing COR members. One could not apply for membership in the organization; one had to be invited by a COR member who would have presented the idea to the COR for approval.¹⁰² At the meeting that led to incorporation in 1970, the executive had changed when a member of the German Volkswagen Foundation, Eduard Pestel, and an economist, who subsequently became the Japanese Foreign Minister, Saburo Okita, replaced Max Konstamm and Jean Saint-Geours. The membership illustrated the importance to the group of common links. King was the Secretary of the OECD Committee on Science and Technology Policy,

⁹⁹ J. Rennie Whitehead, "Chapter 14: IIASA, CACOR and FIT," in *Radar to the Future: The Story of a Boffin*, (available online viewed 8 December 2003 at: <http://www3.sympatico.ca/drrennie/chap13.html>),, p.3.

¹⁰⁰ Mihajlo Messarovic, and Eduard Pestel, *Mankind At the Turning Point: The Second Report to The Club of Rome*, (New York: E. P. Dutton & Co., Inc./ Reader's Digest Press, 1974), p.ix.

¹⁰¹ Peccei, *The Human Quality*, p.74.

¹⁰² Peccei, *The Human Quality*, p.75.

Okita was the Chairman, and executive member Hugo Thiemann was also a member as was Canadian COR member J. Rennie Whitehead. Furthermore Whitehead and Pestel were both members of the NATO Science Committee.¹⁰³ The end result was an organization with an amorphous “cross-section of progressive mankind... prominent scholars, scientists, civil servants, educators and managers from more than thirty countries.”¹⁰⁴

The Predicament of Mankind and the COR’s Rationalist Crusade

Having established the basic parameters of membership and operations, attention shifted to formalising the central focus of the organization. Peccei once commented that his experience as an industrial manager made him acutely aware of the need for clear enunciations of problems in order to ensure effective solutions and the analogous idea that if “we have the terms clear in our minds, it is relatively easy to take the right decisions.”¹⁰⁵ It was this rationalist view that came to permeate the Club of Rome’s approach to global problems and the search for solutions. As will be discussed in the next chapter, it was also an analogous approach to the one advocated by Prime Minister Pierre Trudeau during his first years in office.

The first step in developing solutions to perceived problems was to explore which elements were contained within what Peccei referred to as “*the predicament of mankind*”

¹⁰³ Whitehead said he was reluctant to formally join the COR out of fears of conflict of interest with his position as Science Advisor in the Privy Council Office. In 1969 Prime Minister Trudeau allayed the fears, saying that the two positions were compatible and that it would be an effective way to keep the Canadian government informed of how it could help the COR cause.

Whitehead, “Chapter 13: The Club of Rome,” pp.6-9.

¹⁰⁴ Peccei, *The Human Quality*, p.73.

¹⁰⁵ Peccei, “The Challenge of the 1970s,” p.120.

(sic).”¹⁰⁶ Peccei described the predicament as “an all-pervasive, epoch-making crisis that penetrates all aspects of human life.”¹⁰⁷ He further felt that it emerged from the dual nature of humanity’s technological capabilities and scientific advancements. While there had been substantial improvements in the human condition and quality of life, advances had also created a “Pandora’s Box” with the potential to cause widespread havoc and misery.¹⁰⁸

The most succinct definition of the term was provided in the 1973 submission to the United States Congress by COR member and US Senator Clairborne Pell in his address “The Club of Rome – the New Threshold.” In that address the Senator stated: “What we term the *Predicament of Mankind* is our own limited perception of many individual symptoms of a profound illness of society for which we are unable to prescribe an effective remedy in the absence of reliable diagnosis.”¹⁰⁹ However, COR members felt that Pell’s “individual symptoms” could not be solved in a singular fashion as both causes and cures transcended the specific problems themselves.

Subsequently the practical ramifications of the deeper philosophical problem of “*the predicament of mankind* (sic)” emerged in the form of the “world Problematique”, or in COR parlance, simply the Problematique.¹¹⁰ Peccei defined the Problematique as

¹⁰⁶ Peccei, *The Human Quality*, p.60.

¹⁰⁷ Peccei, *The Human Quality*, p.60.

¹⁰⁸ Peccei, “The Challenge of the 1970s,” p.120.

¹⁰⁹ Clairborne Pell, “The Club of Rome – the New Threshold,” *Congressional Record” Proceedings and Debates of the 93rd Congress, First Session*, (Vol.119 No.43, March 20, 1973), p.1.

Alexander King wrote this address predominantly with input from other Club of Rome members. Alexander King, “Three Key Papers in the Dossiers of the Club of Rome,” in Pentti Malaska and Matti Vapaavouri (editors), *The Club of Rome*, (Turku: Finnish Society for Future Studies, 1984), p.9.

¹¹⁰ Peccei, *The Human Quality*, p.60.

being “a dreadful mixture of problems, whose roots and ramifications we have not managed to grasp, and from which humanity cannot escape.”¹¹¹ He elaborated:

These are problems of all kinds – uncontrolled population growth, gaps and divisions between peoples, social injustice, hunger and malnutrition, poverty, unemployment, obsession with material growth, inflation, economic crises, energy crises, crises in democracy, monetary instability, protectionism, illiteracy, anachronistic education, the revolt of youth, alienation, the gigantic size and decay of cities, delinquency, neglect of rural districts, drug use, the arms race, civil violence, abuse of human rights, scorn of the law, nuclear madness, institutional sclerosis, political corruption, bureaucratization, militarization, destruction of natural systems, degradation of the environment, decline in moral standards, loss of faith, a sense of uncertainty, etc.” Each of these problems follows its own dynamic of change, and they all interact continuously with one another.¹¹²

Alexander King’s explanation of the Problematique contained the same ideas but was presented graphically. At nodule points around a spherical figure with the word “Humankind” at the centre King had listed in a clockwise direction following terms: Global Economic Growth (Services, Agriculture, Industry); New Technologies; Governance and the Capacity to Govern; Mass Media; Global Food Security; Water Availability; Environment; Energy; Population Growth (Migrations, Housing, Health, Employment); Learning System; Values/ Religions; and finally Materials.¹¹³ Using the analogy of a pathogenic disease, King said that the various difficulties identified in the Problematique were “intimately interrelated,” and that finding solutions to discrete problems was becoming increasingly difficult. He claimed an incremental itemized approach was akin to “an attempt to remove symptoms of a disease which has not been fully diagnosed with the consequence that interactions within the system may lead to

¹¹¹ Aurelio Peccei, *One Hundred Pages for the Future*, (New York: Pergamon Press, 1981), p.52.

¹¹² Peccei, *One Hundred Pages*, p.52.

¹¹³ Alexander King and Bertrand Schneider, *The First Global Revolution: A Report by the Council of The Club of Rome*, (New York: Pantheon Books, 1991), p. xviii.

further difficulties in other parts which are not obviously recognised as being due to the initial remedial action.”¹¹⁴

Peccei, King and other COR members were not under any illusions over the magnitude of the effort needed to deal with global problems. The modernization of Africa and parts of Asia, for example was “the greatest enterprise ever faced by mankind” and it required “preparations...as never been seen before.”¹¹⁵ Nonetheless initial steps had to be taken if there was ever to be any progress. The COR’s approach to the Problematique was, as was Pierre Trudeau’s approach to policy development, highly intellectual, rational and technocratic.

There was essentially a four step program of action implied in the COR’s ambitious agenda. First, it was essential to identify the various interrelated problems facing the world. The second step was to launch an extensive and comprehensive study into the causes and interactions between the identified problems. The third step entailed developing tools and practical steps to ameliorate global problems. Step four entailed convincing global political leaders to summon the political will and courage to implement required measures to effectively deal with the “world Problematique.” The final step was the most difficult as it relied heavily upon convincing the world’s politicians of the necessity of enacting potentially unpopular legislative measures to effectively deal with the interrelated issues within the Problematique. The rub lay in the fact that politicians were dependent upon their electorate for their positions.

¹¹⁴ King, *Another Kind of Growth*, pp.9-10.

¹¹⁵ King felt in 1984 that after a decade and a half of activities the COR had to consider its work up to that point “as hopelessly incomplete and with Herculean tasks ahead.”

Peccei, “The Challenge of the 1970s,” p.124.

King, “Three Key Papers,” p.9.

Conclusion

As described in Senator Pell's address, the COR was to be a catalyst for research in "virtually a new and unexplored field." The organization wanted to "encourage the development of methods to elucidate and delineate the elements and interactions within the Problematique, to understand better the workings of the world as a finite system and to suggest alternative options for meeting critical needs."¹¹⁶ It was necessary to first identify problems, then to conduct extensive research into the problems to discover the interrelations and symbiotic relationships in the causes and possible solutions to the problems. From such research, it was believed, would emerge tools, strategies and alternatives to help ameliorate the "world Problematique."

Senator Pell went on to state that the COR wished

To provoke a dialogue with political decision-makers, industrialists, academics and many groups in many places, to arouse appreciation of the nature of the crisis and the need to consider new policies, attitudes and courses of action to ensure the continuity of mankind and to cultivate a new humanism conducive to world peace, social justice and individual self-fulfilment.¹¹⁷

The COR hoped to be able to leverage the reputations and contacts of its renowned members to influence how decision makers approached questions related to policy development. Having relatively easy access to top policy makers may have gained preferential audiences at high bureaucratic and political levels, but, as will be discussed later in the dissertation, it did not guarantee success. As

¹¹⁶ Pell, "The Club of Rome," p.1.
Peccei, *The Human Quality*, p.75.
King, *Another Kind of Growth*, p.12.

¹¹⁷ Pell, "The Club of Rome," p.1.
Peccei, *The Human Quality*, p.75.
King, *Another Kind of Growth*, p.12.

will be illustrated, Club of Rome members ultimately came to realize that there were significant limits to influence.

Chapter 2: The Antecedents to Influence (Part 2) – The Canadian Setting to 1972

As Canadian historians Robert Bothwell and Jack Granatstein said of the 1960s: “The very word conveyed a sense of change.”¹ The text of their book, *Our Century*, showed that Canada was not immune to the growing awareness of issues and the tumult occurring on the international scene in the 1960s.² The decade also witnessed a growing sense of unease and desire for change within Canada’s federal bureaucracy. The need for change was identified as early as Prime Minister Louis St. Laurent’s government in the late 1950s; under his successor, John Diefenbaker, the modernization process became a full-fledged force due to the Royal Commission on Government Organization headed by John Grant Glassco. A Conservative, Glassco’s final report influenced the subsequent development of the federal civil service for at least the rest of the century. By the time the report was completed in 1964, it was left to Prime Minister Lester Pearson, a Liberal, to begin to translate the Glassco recommendations into concrete actions. Pearson initiated some changes in civil service operations, but the 1968 election of Pierre Trudeau as the new leader of the Liberal Party ushered in an era of radical change. In that same year Trudeau won a majority government and his first term in office became marked by the flourishing of new ideas that transformed the way Canada’s public policy making process operated.

This chapter begins with an examination of the evolution of the perceived need for bureaucratic reform up to the 1968 Canadian federal election. Then a closer look is taken at Trudeau’s attitudes towards governance and his belief in the possibility of using

¹ Robert Bothwell and Jack Granatstein, *Our Century: The Canadian Journey*, (Toronto: McArthur & Company, 2000), p.175.

² Bothwell and Granatstein, *Our Century*, pp.165-181.

“functional politics” with its affinity for holistic concepts to create a rational public policy making process. It is within the framework of using reason and a holistic approach to policy development that the attitudes of the Club of Rome (COR) dovetailed with Trudeau’s agenda to “tackle collectively the problems that we cannot solve individually.”³

The chapter will then examine some early reforms enacted by the Trudeau government reflecting the holistic approach to policy development. As will be discussed in this chapter, Pierre Trudeau in the late 1960s and in the early 1970s satisfied both the populist desire for change and addressed the need to modernize Canada’s public policy making procedures and institutions. The new approaches to policy development advocated by Trudeau fit in with the Club of Rome’s advocacy of a holistic long-term approach to policy development.

Creating a Modern Bureaucracy Part 1: Diefenbaker and Glassco

From the time of the formation of the Civil Service Commission (CSC) in 1908 to the decade following the Second World War, the federal bureaucracy was limited in size and predominantly operated informally.⁴ While there was a major expansion in the operation of the civil service in the 1930s and during World War II, information transfer, planning and coordination among civil servants representing different departments continued to operate informally. Historians, political scientists and journalists such as Jack Granatstein, J. E. Hodgetts, Robert Bothwell, Reginald Whitaker, Peter C. Newman,

³ Pierre Elliott Trudeau, and Ron Graham (editor), *The Essential Trudeau*, (Toronto: McClelland & Stewart, Inc., 1998), p.47.

⁴ J. E. Hodgetts, William McCloskey, Reginald Whitaker and V. Seymour Wilson, *The Biography of an Institution: The Civil Service Commission of Canada 1908-1967*, (Montreal: McGill-Queen’s University Press, 1972,) pp.16-19, 40-41,56-60, 82-83, 115 and 137-142.

Christina McCall and others present an image of the senior civil servants, or mandarins, up to the election of John Diefenbaker in 1957 as a relatively homogeneous group who shared common intellectual backgrounds, common interests and who, often with their families, spent extended time in each other's company. It was through this informal process that key strategies were plotted and public policy decisions taken.⁵

The informal system became increasingly hard to maintain due to rapid expansion in federal activities initially during the Great Depression and subsequently during the Second World War. From 1930 into the 1950s, the Canadian federal government became a progressive activist state and, according to public administration expert J. E. Hodgetts, witnessed "the unremitting extension of the long arm of Caesar into the lives and homes of every citizen."⁶ Expansion brought increasing numbers of bureaucrats and pressures to adapt traditional structures to new realities.

⁵ Jack Granatstein described the mandarins who ran the country during the Depression into the 1950s as "an extraordinary group of civil servants." Similarly Peter Newman said that the group "had an uncanny ability to reach consensus on daily problems through casual exchange of gossip over Rideau Club luncheons, the sharing of silences, the homogeneity of their backgrounds and a marked similarity in their habits of thought and action." Beyond lunches, they tended to fish together and often vacationed with each other's families.

Hodgetts et al., *The Biography of an Institution*, p.186, p.209.

Robert Bothwell, Ian Drummond and John English, *Canada Since 1945: Power, Politics, and Provincialism*, (Toronto: University of Toronto Press, 1981), pp.70-71.

J. L. Granatstein, *The Ottawa Men: The Civil Service Mandarins, 1935 – 1957*, (Toronto: Oxford University Press, 1998), pp.xxi-xxii, 12-17, 253-255 and 281-282.

Peter C. Newman, *The Distemper of Our Times: Canadian Politics in Transition*, (Toronto: McClelland & Stewart Inc., 1990), p.92.

Peter C. Newman, *The Canadian Establishment, Volume One*, (Toronto: McClelland & Stewart Inc., 1975), pp.337-339.

Christina McCall-Newman, *Grits: An Intimate Portrait of the Liberal Party*, (Toronto: Macmillan of Canada, 1982), pp.192-200.

⁶ The Glassco Royal Commission in 1962 commented "war, the threat of war and the aftermath of war" had been responsible for an approximate forty percent increase in the public service from 1939 to 1961. Over the same time federal expenditures related to public programs increased twelve times. The key causes of expansion were the emergence of "unemployment insurance and the employment service, family allowances and universal old age pensions, large-scale support for housing, the development of atomic energy, air traffic control, and upper atmosphere research."

J. Grant Glassco, (Chairman), *Royal Commission on Government Organization, Management in the Public Service Volume 1*, (Ottawa: Queen's Printer, 1962), pp.36-37.

J. E. Hodgetts, "Public Power and Ivory Power," in Trevor Lloyd and Jack McLeod (editors), *Agenda 1970: Proposals for a Creative Politics*, (Toronto: University of Toronto Press, 1968), p.258.

The departure of competent managers who returned to the private sector when the war was won was a further complicating factor in the operation of an effective civil service in the post-1945 era. There was also a shortage of capable and trained experts to help with the reconstruction projects and an expanded welfare state.⁷ Matters were made worse by increased competition with the private sector in attracting highly qualified individuals with the requisite skills.⁸ Historian Jack Granatstein further argued that the rapid expansion of civil service numbers, combined with the deaths of key mandarins, brought the great age of the “Ottawa Men” to a close by the late 1950s.⁹

In 1957, Prime Minister Louis St. Laurent appointed Arnold D. P. Heeney to head the CSC to inject “new blood into the organization.”¹⁰ Heeney had proven to be a capable and enthusiastic administrator during his years as the Clerk of the Privy Council during World War II when his reforms helped the government to run the domestic war effort effectively.¹¹ St. Laurent hoped that he would have a similar innovative effect on the operation of the CSC. However, in June of 1957, an unexpected shock compromised Heeney’s ability to enact substantive changes; the Liberals, Canada’s “government party,”¹² lost power to the Progressive Conservatives under John G. Diefenbaker.

After 1957 the civil service, had to contend with a Prime Minister who tended to cast a suspicious and jaundiced eye towards his bureaucracy. In contrast to his

⁷ Hodgetts et al., *The Biography of an Institution*, p.220.

⁸ The commission commented that while there was a substantial difference in the purpose and operation of public versus private bureaucracies, similar skills were required and private management techniques could be employed to improve public sector operations.

Glassco Commission, *Management*, pp.46-47.

⁹ Granatstein, *The Ottawa Men*, pp.253-254.

¹⁰ Hodgetts et al., *The Biography of an Institution*, p.233.

¹¹ David J. Bercuson and J. L. Granatstein, *The Collins Dictionary of Canada History: 1867 to the Present*, (Toronto: Collins Publishers, 1988), p.92.

¹² Reginald Whitaker, *The Government Party: Organizing and Financing the Liberal Party of Canada 1930-58*, (Toronto: University of Toronto Press, 1977), p.166.

predecessor, Diefenbaker did not have complete control over, and support of, the bureaucracy. Historians Robert Bothwell, Ian Drummond and John English stated that while there may have been more polished and impressive parliamentarians of the day, Prime Minister St. Laurent “was master of his cabinet, and of the civil servants who appeared before it.”¹³ The civil service and government appeared to thrive amidst an atmosphere of mutual support and effective governance. Following the 1957 election the civil service had to adjust to performing their jobs under the gaze of a suspicious prime minister.¹⁴

Diefenbaker’s concerns with the civil service led in 1962 to the appointment of the Glassco Commission. It was headed by a private sector chartered accountant and supported by a team of non-public sector advisors. The Commission was “concerned with the ‘how’ rather than the ‘why’ of government.”¹⁵ Political scientist Nicole Morgan

¹³ Bothwell, Drummond and English, *Canada Since 1945*, p.132.

¹⁴ Noted Diefenbaker critic, journalist Peter Newman, commented that the Prime Minister’s distrust of the bureaucracy was, ultimately, a critical factor in his downfall. Newman said that had he had more trust in the civil service he might have been able to effectively govern but Diefenbaker “refused to trust the bureaucrats, because they had been appointed by his Liberal predecessors, and fell back to relying on advice on the political hacks that sought his favours. These men were sensitive to the problem of continued incumbency and little else.” However, historian Jack Granatstein has argued that the unease felt by Diefenbaker about the close relationship between the bureaucracy and the long-time governing Liberal Party began by the mid-1950s to be felt in the broader Canadian society as well. He latter added that the subsequent numbers of key civil servants from that time who went into Lester B. Pearson’s Liberal government appeared to give credence to Diefenbaker’s paranoia.

A nadir in the Diefenbaker-civil service relationship emerged in 1959-1960 in an uncharacteristic public fight between the government and bureaucracy over Bank of Canada governor James Coyne. Political commentator Peter Newman identified the Coyne controversy as “the event which destroyed the political invincibility of the Prime Minister.” Differences of opinion in terms of national fiscal policy led to Coyne’s dismissal by the government and a subsequent investigation in which Coyne was exonerated.

Peter C. Newman, *Renegade in Power: The Diefenbaker Years*, (Toronto: McClelland and Stewart Limited, 1968), p.xii, p.295, and pp.319-321.

Bothwell, Drummond and English, *Canada Since 1945*, p.198.

Granatstein, *The Ottawa Men*, p.263, p.266 and p.271.

Bothwell, Drummond and English, *Canada Since 1945*, pp.221-225.

Bercuson and Granatstein, *The Collins Dictionary*, p.52.

¹⁵ Given the Prime Minister’s suspicious and often difficult relationship with the bureaucracy, it is not surprising that he wanted to get an outside perspective on the operations of the public sector. John Glassco had the added attractive quality for the Prime Minister of being a known Progressive Conservative Party supporter. Long-time Liberal Cabinet Minister Mitchell Sharp mused that Diefenbaker’s government may

commented that the shutting out of the “old mandarins” from the Glassco Commission was calculated and implied that the government felt they did “not have anything worthwhile to contribute to a new administrative philosophy oriented towards the future.”¹⁶

The Glassco Commission produced a report that laid the foundations for fundamental changes in the operation of the decision making process within the federal bureaucracy. As Nicole Morgan later stated, the report became “the bible of those who put in motion the great administrative reforms of that decade.”¹⁷ The Commission was a clarion call to “Revolutionary” changes for the operating of the Civil Service.¹⁸ The final

have been more successful if he had been able to convince people like Glassco to take on a greater political role.

At the time of his appointment Glassco was a Chartered Accountant who held, among a long list of other private positions, the offices of the Executive Vice-President of Brazilian Traction, Light and Power and Vice President of the Canadian Imperial Bank of Commerce. In addition he served as a director for: National Trust Co. Ltd., The Manufacturers Life Insurance Co., and The Southam Co. Ltd. Similarly the Commission’s Executive Director, Ronald S. Ritchie was a manager in Imperial Oil’s employee relations department. Working with Glassco and Ritchie on the commission were approximately 170 assistants and consultants drawn predominantly from the private sector. In addition, academic J. E. Hodgetts served as the editorial director for the Glassco Commission.

Glassco Commission, *First Report*, p2.

Ronald S. Ritchie, “Viewpoint: The Need for Continuing Education,” *Canadian Personnel & Industrial Relations Journal*, (August, 1961), in (NAC: MG30-E168 John Grant Glassco Scrapbook II), n.p.

Nicole Morgan, *Implosion: An Analysis of the Growth of the Federal Public Service in Canada (1945-1985)*, (Montreal: Institute for Research on Public Policy, 1986), p.54.

J. E. Hodgetts, *The Canadian Public Service: A Physiology of Government 1867-1970*, (Toronto: University of Toronto Press, 1973), p.24.

Mitchell Sharp, *Which Reminds Me: A Memoir*, (Toronto: University of Toronto Press, 1994), p.85, p.87.

J. Grant Glassco, (Chairman), *Royal Commission on Government Organization, First Report on Progress*, (Ottawa: Queen’s Printer, 1961), p.19, p.1.

J. Grant Glassco, “The Accountant in Management,” *The Canadian Chartered Accountant*, (July, 1961), found in NAC M.G 30 E58: “John Grant Glassco, Royal Commission on Government Organization,” (NAC: MG30-E168 John Grant Glassco Scrapbooks Book II: 1 May-1 September, 1962). (Hereafter referred to as Glassco Scrapbook II), p.37.

¹⁶ Morgan, *Implosion*, p.54.

¹⁷ Morgan, *Implosion*, p.55.

¹⁸ J. E. Hodgetts and others argue that the Glassco Commission ultimately served to illustrate “the sorry state of personnel management” within the CSC. Despite the litany of problems identified, reaction to the report was generally positive, including from many of the civil servants directly affected by the Commission Report.

N.A. “Glassco Commission Urges Revolutionary CS Changes,” *The Ottawa Journal*, (6 September, 1962), in (NAC: MG30-E168 John Grant Glassco, Scrapbook III), p.1.

report's underlying advocacy of adopting more private business practices in the operations of the public service and the idea of "letting the managers manage" became mantras in subsequent civil service reforms.¹⁹

Glassco argued that the civil service ought to be conducted in a more business-like manner and that able public managers had to be given the latitude to effectively manage their departments. The Commission's final reports made a distinction between the political skills of ministers and the required administrative skills of senior bureaucrats who needed the freedom and ability to properly execute their duties. While permanent officials were key advisors and needed general guidance, they bore "full personal responsibility" for day-to-day operations within a department. The final report stated that the power of departmental administrators had to be expanded "to enable department heads to do the job for which they [were] accountable [and] to permit a proper delegation and responsibility within departments."²⁰

The Glassco report was both a beginning and an end. It was an initiator of change and was a largely successful attempt to bring private business concepts into the public bureaucracy. The report was also the official death knell of an older tradition of conducting public affairs described by historian Jack Granatstein in *The Ottawa Men*.

Hodgetts et al., *The Biography of an Institution*, p.284.

Charles Lynch, "Civil Service Shake-Up Urged: Royal Commission is Highly Critical," *Hamilton Spectator*, (6 September, 1962) found in Glassco Scrapbook III.

Maurice Cutler and Paul M. Dunn, "Civil Servants Say Glassco Criticisms Justified," *Ottawa Citizen*, (7 September, 1962), in (Glassco Scrapbook III), n.p.

¹⁹ Morgan, *Implosion*, pp. 54-55.

²⁰ Glassco, *Report, Volume 1*, p.33.
Glassco, *Report, Volume 5*, p.77.

The old informal modes of operation were not sustainable in a vastly expanded public bureaucracy.²¹

Matters of effective departmental administration had become critical in an age that was witnessing the birth, development and expansion of the social safety net. The 1962 report commented that the traditional means of conducting policy development in the relatively small civil service was no longer feasible due to the expansion of the bureaucracy in the previous two decades and the ever-increasing complexity of public administration issues.²² The ideas associated with the Glassco Commission, especially the theme of letting the managers manage have enjoyed substantial longevity.²³ Political scientist Donald Savoie commented that governments since the Glassco Commission had attempted to find ways of ensuring that the managers were allowed to manage.²⁴ The Glassco Commission ushered in a cult of the new in Ottawa's bureaucratic circles, a cult that began to have an impact during the government of Lester B. Pearson and persisted into the Trudeau era and beyond.

²¹ While Glassco was conducting his inquiries, an article in *The Executive* on the passing of C. D. Howe in 1961 foreshadowed the end of an era beyond the death of a single individual. The article asked, "Have We Seen the Last of the Great State Managers?" The old style public bureaucracy was no longer working; the landscape had changed and an era of adjustment ensued.

Granatstein, *The Ottawa Men*, pp.xi-xxii, 253-256 and 280-282

N.A. "Have We Seen the Last of the Great State Managers?" *Executive*, (February, 1961), found in NAC M.G 30 E58: "John Grant Glassco, Royal Commission on Government Organization," (Scrapbooks Book I – 1 September 1960-30 April 1961), p.11.

²² Glassco *Report Volume 1*, pp.36-41.

²³ Fifteen years after its publication a subsequent Royal Commission, the Lambert Commission, commented that Glassco led to "a wave of action that led to new institutions, policies and procedures that must now be reviewed."

Allen Thomas Lambert, H. Marcel Caron, John Edwin Hodgetts, and Olive Gerald Stoner, (Hereafter referred to as the Lambert Commission), *Royal Commission on Financial Management and Accountability: Progress Report*, Ottawa: Minister of Supply and Services Canada, 1977), p.3.

²⁴ Donald J. Savoie, *Governing From the Centre: The Concentration of Power in Canadian Politics*, (Toronto: University of Toronto Press, 1999), p.198.

Creating a Modern Bureaucracy Part 2: Pearsonian Tinkering

The task of creating and maintaining a collegial and unified civil service operating system became increasingly problematic during the Pearson era from 1963 to 1968 due to the vast expansion of governmental activities. The book *Canada Since 1945* stated that in comparison to the Pearson and Trudeau governments, the Louis St. Laurent government was minimalist in terms of the role of the federal government in the national economy.²⁵ Historian John English argued that Pearson's political philosophy and will moved the Liberal Party to the left, "far away from St. Laurent Liberalism."²⁶ Pearson advisor Tom Kent added that the defeat of the Liberal Party in 1957 was beneficial and created the circumstances in which the Liberal Party had to seek renewal. The extended time in office under Mackenzie King and then Louis St. Laurent had made the Liberals into "the complacent, autocratic establishment party, out of touch with the increasingly confident social values of a new Canada." The defeat led to the departure of an old guard that created a vacuum and allowed "a new generation of activists to take it over."²⁷

A critical step in that process occurred at the Thinkers Conference at Queen's University in Kingston, in September 1960. Pearson had wanted to create a sense of renewal within the Liberal Party and reinvigorate it with new ideas. While he claimed to look to the grass roots, Pearson opted to look outside the party for inspiration and ideas. The individuals asked to speak were chosen based upon reputation and perspectives, not political affiliation.²⁸

²⁵ Bothwell, Drummond and English, *Canada Since 1945*, p.178.

²⁶ John English, *The Worldly Years: The Life of Lester B. Pearson Volume II: 1949- 1972*, (Toronto: Alfred A. Knopf Canada, 1992), p.212.

²⁷ Tom Kent, "Can the System be Moved?," in Howard Aster & Thomas S. Axworthy, (editors), *Searching for the New Liberalism: Perspectives, Policies and Prospects*, (Oakville: Mosaic Press, 2003), p.23.

²⁸ The 1960 conference organizer Mitchell Sharp, who was not a member of the Liberal Party at that time, said that there was "One rule we enforced rigidly: no member of Parliament was to be on the program

In part as a result from the 1960 conference and the existing ideas from the Glassco Commission, the Pearson-led minority Liberal government came to power in April 1963 imbued with a strong sense of purpose and reformist zeal.²⁹ The Glassco Report had supporters within the Pearson government such as Mitchell Sharp and the new government began to implement some of the ideas emanating from the Glassco report.³⁰ For example, in 1963, the position President of the Treasury Board was created and made into law three years later. The position took on responsibility for coordinating managerial matters that had traditionally been within the Department of Finance.³¹ The Board was now to act as a strong central agency to help guide public policy and administrative matters. The subsequent Royal Commission on Financial Management and Accountability, the Lambert Commission, commented that the Treasury Board's purpose

as speaker, except Jack Pickersgill." He was asked to give a summation talk when the conference ended. The result were presentations by "non-Liberals and anti-Liberals" such as Tom Kent and Frank Underhill. External presenters, such as Tom Kent, Maurice Lamontagne and others called for a more activist state and for the creation of what would become an expanded Canadian welfare state. Tom Kent has stated that Sharp requested that he and Lamontagne write provocative essays designed to stimulate discussion. He did so with the expectation that the conference was to have been a private event without media involvement, but last minute pressure on Liberal Leader Pearson turned the conference into a media event with wide coverage.

Sharp, *Which Reminds Me*, p.89

Pearson, *Mike: Vol. III*, p.53.

Tom Kent, *A Public Purpose: An Experience of Liberal Opposition and Canadian Government*, (Kingston: McGill-Queen's University Press, 1988), pp.80-81.

²⁹ Liberal MP Jack Pickersgill said the Thinkers Conference was "The most important event of 1960" for the Liberal Party. Pearson said it was "a great success [and] the beginnings of our comeback". Key Liberal strategist Keith Davey stated that the ideas formed the basis of the second prong in a three pronged-attack in the 1962 election. During the campaign, the Liberals attacked the Diefenbaker government's record, it advanced "the positive programs that emerged from the 1960 Kingston Conference," and put together an impressive Pearson Team to compensate for deficiencies in Pearson's leadership abilities. Liberal insider and author Joseph Wearing added that the conference was an attempt to "lure new people into the party" and it "gave the party an election platform as well as an agenda when they took power." Individuals such as Mitchell Sharp were drawn into politics and Pearson's cabinet.

J.W. Pickersgill, *Seeing Canada Whole: A Memoir*, (Markham: Fitzhenry & Whiteside, 1994), p.536.

Pearson, *Mike: Vol. III*, p.53.

Keith Davey, *The Rainmaker: A Passion for Politics*, (Toronto: Stoddart Publishing Co. Limited, 1986), pp.53-54.

Joseph Wearing, *The L Shaped Party: The Liberal Party of Canada 1958-1980*, (Toronto: McGraw-Hill Ryerson Limited, 1981), pp.19-20.

³⁰ Sharp, *Which Reminds Me*, p.87.

³¹ Hodgetts, *The Canadian Public Service*, p.95, pp.257-258.

was to develop “government-wide approaches” for management issues and for ensuring that common procedures were being followed.³² The Treasury Board was “viewed essentially as the cabinet’s management arm” and set the tone and direction for the operations of the broader bureaucracy.³³ The Treasury Board was to act as a liaison between the Cabinet and bureaucracy with a direct representative in the powerful Privy Council Office.³⁴

Glassco’s themes concerning the need for greater coordination, planning and program development spread throughout federal departments during the Pearson era. Committees abounded as reforms to the Treasury Board led to reforms in the operations of government departments. The idea of program planning and multi-year budgeting through the Programming Planning Budgeting System began to emerge during the Pearson government. Under the auspices of the Treasury Board Secretariat, this system was a substantial shift from the traditional item-based expenditure assessments. Now departments had to account for a broader view and to provide extended forecasting. The changes required a longer time frame, up to five years ahead, in terms of program budgeting. Before this system, short-term pressures tended to dominate the budget making process.³⁵ In addition, the Pearson government was active in establishing external agencies with a focus on policy matters. The creation of the Economic Council of Canada

³² The Lambert Commission, *Progress Report*, pp.20-21.

³³ Hodgetts, *The Canadian Public Service*, p.257.

³⁴ Hodgetts, *The Canadian Public Service*, p.258.

³⁵ Bureaucratic expert Hodgetts claims that the most common manifestation of the change in approach to departmental operations was the requirement for advanced estimates of operations for the following year’s activities. Deputy Ministers and their advisors had to prepare comprehensive program plans that clearly identified program goals, the means to achieve such goals, cost-benefit analysis and forecasts of expenditures for a subsequent three to five year period.

The Lambert Commission, *Progress Report*, p.23.

Hodgetts, *The Canadian Public Service*, pp.214-215.

(ECC) in 1963 and the Science Council of Canada (SCC) were evidence of supra-departmental agencies being established to develop planning strategies.³⁶

Pearson's government began the quest for greater administrative and managerial efficiency; however, it took until the end of the decade for the "revolutionary" changes to the civil service system to materialize. It is perhaps no surprise that career civil servant Lester B. Pearson was hesitant to bring in radical change to the operation of a bureaucracy in which he had thrived for years. Trudeau however was not sentimentally bound by any such ties and proceeded to enact substantive bureaucratic changes.

Creating a Modern Bureaucracy Part 3: Trudeau - the Functionalist in Power

The Pearson government from 1963-1968 began to implement reforms in machinery of government that by the end of the decade enabled Prime Minister Trudeau to begin a substantial overhaul of the bureaucratic system. The Pearson era reforms witnessed the beginning of the Treasury Board as a centralized horizontal institution to which other main/ vertical departments and bureaucracies reported. Political scientist J.E. Hodgetts commented that when Treasury Board was severed from the Department of Finance, and established as a major coordinating force, the move reflected the necessity to have a "central focus and leadership" for managerial decisions within the public service.³⁷ While a promising initial step, Trudeau felt it was not sufficient to create an effective policy-making process.

Despite the reforms that Diefenbaker and then Pearson promoted, Pearson's Minister of Justice and successor, Pierre Trudeau, was "struck by the amateurism that

³⁶ Hodgetts, *The Canadian Public Service*, p.216.

³⁷ Hodgetts, *The Canadian Public Service*, pp.258-259.

reigned in the upper echelons of the federal government.”³⁸ Especially disconcerting were the lack of coordinated agendas, the quality of Cabinet meetings and their ultimate effectiveness. Pearson and his close advisors tended to have their minds decided before Cabinet meetings were held and other members of Cabinet had relatively little influence on the final decisions.³⁹ Trudeau was not alone in his opinions. In the early 1960s he, along with Marc Lalonde, was part of The Committee for Political Realism. The Committee’s “Canadian Manifesto” was a blistering attack on the state of politics and decision-making in Canada at the time. In a document translated by federal bureaucrat Michael Pitfield,⁴⁰ the Committee argued that federal decision-making was characterized by “haphazard political expediency” and there appeared to be “great difficulty and little success... in coordinating their own activities.”⁴¹

Trudeau advisor Marc Lalonde commented, “Most parliamentarians, the prime minister included, and most students of parliamentary government, agree that parliamentary reform was long overdue by the mid-sixties.”⁴² It was the quest for a reformed system that drove The Committee for Political Realism who sought solutions to

³⁸ Pierre Elliott Trudeau, *Memoirs*, (Toronto: McClelland & Stewart Inc., 1993), p.107.

³⁹ Marc Lalonde who worked for Pearson said that the prime Minister was the last of his kind in that he personally knew virtually all the senior civil service and had an open door policy where senior civil servants could just drop into his office to discuss matters.

Trudeau, *Memoirs*, p.108.

Rock Demers and Kevin Tierney (Producers), “The Art of Governing 1968-1972,” *Pierre Elliott Trudeau, Memoirs*, (Volume 2: Episode 3), Markham: Les Productions La Fete/ Polygram Video, 1994.

⁴⁰ Journalist Christina McCall-Newman explained that Pitfield’s involvement with the Committee was peripheral and he was not able to be formally listed as a member of the group due to his position as a civil servant.

Christina McCall-Newman, “Michael Pitfield and the Politics of Mismanagement,” *Saturday Night*, (October, 1982), p.27.

⁴¹ Breton et al., “An Appeal,” pp.31-32.

⁴² Writer Christina McCall-Newman similarly argued that during the Pearson era, a consensus emerged that the established bureaucracy had to be placed under tighter political control, become more accountable and efficient, and was in need of new personnel in order to infuse the civil service with new intellectual ideas.

Marc Lalonde, “The Changing Role of the Prime Minister’s Office,” *Canadian Public Administration*, (Volume 14 No. 4, Winter 1971), p.511.

McCall-Newman, “Michael Pitfield,” p.32.

the perceived difficulties of leadership and public policy development in Canada in the John G. Diefenbaker and Lester B. Pearson era. Trudeau, Lalonde and the other members of the Committee invited Canadians to join them in building a better country founded on rational democratic principles.⁴³ Journalist Peter C. Newman has argued that during the 1968 Liberal Leadership campaign it became obvious that people who supported Trudeau “would also be subscribing to a managerial revolution in Canadian politics.”⁴⁴

After gaining power in 1968, Trudeau and his advisors, especially Pitfield, “set about overhauling a bureaucracy they considered old-fashioned and inefficient.”⁴⁵ The new managerial approach was to be steeped in the profoundly rationalist approach of functional politics.⁴⁶ As discussed below, it was a highly intellectual approach to decision-making that, as far as possible, was theoretically devoid of subjective considerations. The arch-rationalist Trudeau who had become known for his reason over passion approach to politics was drawn to the functional approach as it offered an approach to policy development that was calculating and devoid of subjective instincts and whims.

Trudeau once wrote that governance was unavoidable, but that it was necessary “to mitigate as far as possible the damage done by the madness of our rulers.”⁴⁷ It was a

⁴³ Breton et al., “An Appeal,” p.33.

⁴⁴ Newman, *The Distemper*, p.616.

⁴⁵ McCall-Newman, “Michael Pitfield,” p.24.

⁴⁶ In this essay the term “functional public policy development” refers to a scientific approach to public policy that seeks to develop legislative responses to issues by choosing the most efficient and cost effective option derived from objective evaluations of a plurality of policy alternatives and their respective potential outcomes and consequences in the near and long term timeframes.

Michael Howlett and M. Ramesh, *Studying Public Policy Policy Cycles and Policy Subsystems*, (Toronto: Oxford University Press, 1995), pp.140-141.

⁴⁷ Pierre Trudeau, “When Madmen Think They are Ministers and MPs,” in Pierre Trudeau, *Approaches to Politics*, (Toronto: Oxford University Press, 1970), p.26.

sentiment shared by the other members of the Committee for Political Realism mentioned above. In their 1964 manifesto the Committee remarked that “Emotional cries often drown out the voice of reason,” and that political leaders, in lieu of rational ideas and proposals, campaigned on “propaganda loaded with emotional slogans.”⁴⁸ It is therefore not surprising to find Committee members drawn to the idea of functional politics as it offered the hope that it was possible to develop public policy based strictly upon public policy makers being “coolly intelligent”.⁴⁹

The idea of functional policymaking emerged from the rational school of thought. Political scientists Michael Howlett and M. Ramesh explained that rationalists believed that once a problem area/ issue was properly identified, it was necessary to first develop a list of possible policy solutions. Then all possible and probable consequences had to be explored and contrasted. The final policy option chosen would reflect both the most efficient and cost-effective approach. While the basic rationalist approach developed from the later years of the nineteenth century and the early decades of the twentieth century, by mid-twentieth century the supplemental idea evolved that to be effective the rationalist model also had to be comprehensive.⁵⁰

It is the rational-comprehensive approach to policy development that this dissertation refers to as “functional” and which held a great deal of attraction for Trudeau. However, it was evident by the mid-to-late 1950s, long before Trudeau was drawn to Ottawa that the possibility of establishing a functional approach to policy

⁴⁸ Albert Breton, Raymond Breton, Claude Bruneau, Yvon Gauthier, Marc Lalonde, Michael Pinard and Pierre Trudeau, and P. M. Pitfield (Translator), “An Appeal for Realism on Politics,” *Canadian Forum*, (May 1964), p.29, p.31.

⁴⁹ Adapted from line written by Trudeau a June 1950 edition of *Cité Libre*.

Pierre Elliott Trudeau, “Functional Politics,” in Pierre Elliott Trudeau with Gerard Pelletier (editor) *Against the Current Selected Writings 1939-1996*, (Toronto: McClelland & Stewart Inc., 1996), p.28.

Ramsay Cook, “Introduction,” in Trudeau, *Approaches*, p.13.

⁵⁰ Howlett and Ramesh, *Studying Public Policy*, pp.140-141.

development was inherently problematic. Functional critics, such as Herbert Simon, began to question the utility of the any comprehensive approach to decision-making and to dismiss it as being impossible. His three pronged attack argued: first, the human intellect was not capable of knowing and considering all possible options to any given problem; second, it was not possible to know in advance the consequences of policy choices. And third, given the various positive and negative attributes and interactions among policy decisions, straight comparisons were not practical or possible.⁵¹

Despite criticisms the future Prime Minister's enthusiasm for the potentially liberating impact of objective-based functionalism over subjective-based emotional nationalism was evident in his 1964 address to the Canadian Political Science Association. In his speech he said that it was not possible to completely remove emotion from politics, but he had hoped it was possible to redirect it away from the parochial excesses of nationalist sentiment. Trudeau then said: "If politicians must bring emotions into the act, let them get emotional about functionalism."⁵²

Prime Minister Trudeau: The Holistic Rationalist in Power

Further evidence that change was coming to the Canadian public policy development process came early in the Trudeau years. In 1968, the stage was set for fundamental change in the operation of the public policy making process. Trudeau sought to use the notion of "participatory democracy" to emulate the success of the 1960

⁵¹ Academics Richard E. Neustadt and Ernest R. May argue that while no two sets of circumstances are identical there tends to be similarities that, when closely examined and vetted, can prove to be useful guides in helping to develop public policy.

Howlett and Ramesh, *Studying Public Policy*, pp.140-141.

Richard E. Neustadt and Ernest R. May, *Thinking in Time: The Uses of History for Decision Makers*, (New York: The Free Press, 1986), pp.xii-xviii.

⁵² Pierre Elliott Trudeau, "Federalism, Nationalism, and Reason," in Trudeau, *Against*, p.vi, pp.196-197.

Thinkers' Conference held in Kingston, but on a larger, more complex, scale. Lester B. Pearson government's vast transformation of Canadian social policy had its genesis in Kingston. Pearson's idea to "convene a gathering of public-spirited, informed, experienced Canadians to give us their views on the most important questions of the day" flourished in a different way under Trudeau.⁵³

Evidence of the new Prime Minister's fresh approach to policy development was visible in November 1969 at another Liberal thinkers conference, this time at Harrison Hot Springs in British Columbia. Building upon the 1960 Thinkers' Conference model, it was expected that the Harrison Conference was to be the first step in a new approach to Liberal policy development. It was more ambitious than the Kingston conference in that it was to be part of grass-roots policy process. Local riding associations were to be involved in the policy process from the outset. The process was to cumulate in a major policy convention in 1970 where delegates were to help give the governing party, and thereby the country, a strong sense of policy direction for the subsequent years.⁵⁴ Trudeau considered the Harrison Conference to be a virtual "supermarket of ideas" provided by external experts as well as by rank and file Liberals through their associations.⁵⁵

⁵³ Pearson, *Mike Vol. III*, p.53.

⁵⁴ Christina McCall -Newman, *Grits: An intimate Portrait of The Liberal Party*, (Toronto: Macmillan of Canada, 1982), p.122.

Wearing, *The L-Shaped Party*, p.162.

Pierre, E. Trudeau, "Notes for Remarks by the Prime Minister at the Harrison Liberal Conference Harrison Hot Springs, British Columbia, November 21, 1969," (NAC: MG28 Volume 1165 File "Harrison Liberal Conference,") pp.1-2.

Lorna Marsden, "The Party and Parliament: Participatory Democracy in the Trudeau Years," in Thomas S. Axworthy, and Pierre Elliott Trudeau, (editors), *Towards a Just Society: The Trudeau Years*, (Toronto: Penguin Books, 1992), p.316.

⁵⁵ Trudeau, "Notes for Remarks," p.10.

At the inaugural speech of the conference, Prime Minister Trudeau announced that for private or public organizations, including governments, planning required a time frame sufficient to enable the future to be altered. The examples he used were water pollution and an airplane pilot. He claimed water pollution was the result of decisions made, or not made, in the previous decade. Similarly Trudeau said that planning in government was similar to the need for airline pilots to plan their landings long before an airport came into view. He said that planes required radar and political parties through the creation of legislation had the potential to “act as a society’s radar.”⁵⁶

The speech also included passages that presented symmetry with Club of Rome (COR) ideas and opinions. For example, throughout the speech Trudeau developed a theme that the COR would also subsequently stress: the future was not set, but was a malleable human construct. Trudeau stated, “With the refinement of our techniques for forecasting and planning, we are coming to realize that the image we hold of our future is itself an important element of that future.”⁵⁷ In the “Talking Points for Discussion” section of a version of the speech, it was noted that Canada had to “forecast the characteristics of the world in the next decade... to derive policies which will promote a better world environment and hence a united prosperous Canada.”⁵⁸ The speech and talking points sections raised other themes that would be argued independently by the COR. For example, the reciprocity of interest between Canada and improving the plight of Third World nations was noted. Trudeau expressed a strong belief in the perils of

⁵⁶ Trudeau, “Notes for Remarks,” p.4.

⁵⁷ Trudeau, “Notes for Remarks,” p.10.

⁵⁸ --- “Talking Points for Discussion on International Affairs at the Harrison Conference,” (NAC: MG 32 Series B41 Volume 97, File “Liberal Thinkers Conference 1969-70,”) p.3.

exponential population growth and stated that the world faced a “[d]angerous and imminent ecological imbalance.”⁵⁹

In addition, the Trudeau approach to the development of policy initiatives tended to mirror the Club of Rome approach to the Problematique. As deduced from the evidence provided below and in the next chapter, Trudeau advocated a five-step approach to policy development. The first step was identifying that there was a problem. The second step was to conduct a through study into the nature of the problem and, thirdly, to study alternative ways of dealing with the initial problem(s). The fourth and fifth steps were to be the development of legislation and implementation of effective policy ideas.

In practical terms Trudeau’s concern for greater holistic horizontal thinking in the process of policy development was evident at the apex of federal power, within the Cabinet decision-making processes. One of Trudeau’s earliest reforms was to bring in the Cabinet Committee on Priorities and Planning (CCPP). The Prime Minister handpicked this powerful committee. Its purpose was to develop broad policy priorities for the government and to have them translated into general guidelines for departments and agencies to use in the development of their policies. From the various sub-committees that were established, cabinet ministers would then provide information to the rest of Cabinet via memoranda that all were expected to read and be able to both pass educated comment on and ultimately to be able to debate the various policy options available.⁶⁰

Former Pearson, and subsequent Trudeau, Cabinet Minister Mitchell Sharp commented

⁵⁹ --- “Talking Points for Discussion,” pp.4-5.

⁶⁰ The Lambert Commission, *Progress Report*, pp.24-25.

Richard D. French, *How Ottawa Decides: Planning and Industrial Policy Making 1968-1984*, (Toronto: James Lorimer & Company, Publishers, 1984), p.5.

In contrast to the rhetoric of participatory democracy, Trudeau opted for a top-down approach to ensuring governmental policy consistency. As discussed later in this chapter, one of the ironies through the Trudeau approach was the emergence of a diffuse policy making system involving greater numbers of policy actors that lacked the accountability of the top-down approach.

that the CCPP operated like an university seminar on political science.⁶¹ Similarly, former Prime Minister's Office (PMO) head Marc Lalonde recalled with a chuckle that other Pearson-era Cabinet ministers like Eric Kierans complained bitterly about Cabinet meetings being "those bloody seminars".⁶²

The tenor of Cabinet meetings changed from the Pearson era as, according to Minister Sharp, Trudeau "gave new substance to the principle of collegiality."⁶³ Ministers were expected to become fully familiar with areas of concern far outside their specific departments. Cabinet members had to prepare lengthy memoranda that clearly identified: the policy question/ problem being addressed; the advantages and disadvantages of all the possible solutions identified; and an indication of the option preferred by the Minister and finally why the option was preferred.⁶⁴ This meant far more work for cabinet ministers who had to become virtually experts within their own areas of jurisdiction and to become knowledgeable about the issues in other ministerial jurisdictions as well.⁶⁵ Trudeau advisor Michael Pitfield said that the process was meant to ensure that ministers and key advisors were aware of what was happening in all government departments and to facilitate debate and the airing of counter arguments before firm opinions could be formed.⁶⁶

Trudeau's rationalist approach to policy development at the Cabinet level, was also evident in the proliferation of cabinet committees and written documentation.

Proposals no longer went directly to general cabinet, but rather were first sent to cabinet

⁶¹ Sharp, *Which Reminds Me*, p.165.

⁶² Demers and Tierney, "The Art of Governing 1968-1972".

⁶³ Kurlansky, *1968*, p.xvii.

⁶⁴ Sharp, *Which Reminds Me*, p.165.

⁶⁵ Trudeau, *Memoirs*, pp.110-111.

⁶⁶ Sharp, "Decision Making," pp.4-6.

Pitfield, "The Shape of Government," pp.15-16.

Pitfield, "The Shape of Government," p.13.

committees for consideration. It was hoped that the process would lead to stronger cabinet proposals. Sharp commented that as most ministers served on at least three cabinet committees, it aided in cross-fertilisation of ideas and meant that ministers were more aware of other departments than before.⁶⁷ The new process produced more knowledgeable cabinet ministers, who were less dependent on staff for policy guidance, but the emergence of increasingly complex problems left “plenty of scope for the exercise of the analytic powers and judgement from senior permanent advisors.”⁶⁸ According to Pitfield, the greater coordination of government purpose was necessary as previous governments had “little, if any, view of the whole.” As a result, “Important, but not always obvious, inter-relationships were ignored.”⁶⁹

Liberal cabinet ministers however, viewed the new cabinet system with varying degrees of interest and suspicion. Among the more neutral statements came from long-time Member of Parliament Herb Gray who commented that Trudeau’s rationalist approach to policy development led to a massive proliferation of cabinet committees and written documentation.⁷⁰ Gray’s comment hinted at the most obvious consequence of the new Trudeau approach - a vastly increased workload on the part of Ministers and their advisors. Minister Sharp commented that under Pearson civil servants were told to keep briefs to a maximum of two pages whereas under the new Trudeau system it was not unusual to have submissions of fifteen pages or more.⁷¹ Similarly, fellow Cabinet Minister Donald Macdonald commented that there was an ever-growing volume of

⁶⁷ Sharp, “Decision Making,” p.5.

⁶⁸ Sharp, “Decision Making,” p.6.

⁶⁹ Pitfield, “The Shape of Government,” p.10.

⁷⁰ Herb Gray, Conversation with Graduate Students at the Centre for International Governance Innovation, 19 January 2005.

⁷¹ Sharp, *Which Reminds Me*, p.166.

documents that ministers were expected to have read. He added that by the time he left Cabinet in 1977, he was required to carry a four-ring eighteen-inch by eight binder to accommodate the volume of material and that “even then I could barely accommodate the papers I needed”.⁷²

In contrast to the aims of a more collegial approach, many Cabinet ministers came to view the new approach as more of a hindrance than a benefit. Trudeau later conceded that numerous members of his cabinet were not pleased with his new collegial holistic approach to policy development. In his *Memoirs* Trudeau commented that many of his Ministers viewed the new Cabinet procedures “as a deplorable waste of time, or as an interesting but politically useless intellectual exercise.”⁷³

Cabinet meetings often became prolonged exercises in thinking about future situations and potential approaches to solving the problems discussed. Ministers such as Mitchell Sharp, Allan MacEachen, Donald Jamieson and Eugene Whelan thought that such exercises did not represent a practical way to address the pragmatic political business of running a country. Sharp, who appeared to have generally found the new process engaging, said that a conscientious minister could become well informed about what was happening in government, but “could become exhausted if they were too conscientious.”⁷⁴ Fellow Cabinet Minister Eugene Whelan added: “There was no way

⁷² Donald S. Macdonald, “The Trudeau Cabinet: A Memoir,” in Andrew Cohen, and J. L. Granatstein (editors), *Trudeau’s Shadow: The Life and Legacy of Pierre Elliott Trudeau*, (Toronto: Random House of Canada, 1998), p.165.

Trudeau, *Memoirs*, pp.110-111.

⁷³ Trudeau, *Memoirs*, p.112.

⁷⁴ Sharp, *Which Reminds Me*, p.166.

any minister could go through all that material and also look after his own department... most cabinet meetings were pretty much a waste of time.”⁷⁵

Other Trudeau cabinet members were also highly critical of the collegial holistic approach. Allan MacEachen felt Trudeau was misguided in attempting to totally supplant the predominantly ad hoc system of policy development active in the Pearson government. According to MacEachen, Trudeau’s new approach predicated upon collegiality and long term planning was fundamentally flawed and incompatible with a democratic form of government. He said that cabinet meetings would often spend an excessive amount of time speculating about the future, discussing systems approaches and the importance of integrated policy development. MacEachen added that predicting the future was an impractical activity as in order to get it right one had to control all the variables and, in a democratic system such as Canada and the United States, a government could only possibly influence the four to five years of its mandate.⁷⁶

MacEachen went on to describe Trudeau as a “philosopher king” who was plagued by a perception among the Canadian population for being aloof. Ministers such as MacEachen and Don Jamieson considered the process had two key flaws: it was too theoretical and it was a process that failed to emphasise the political realities associated with electoral politics.⁷⁷ Minister Mitchell Sharp also stated that there was a great deal of time spent discussing systems approaches, but that many Cabinet members did not pay a great deal of attention to its political applications.⁷⁸ Matters came to a head in 1973 during a caucus retreat at Meech Lake under the theme of “In Search of a New Mandate.”

⁷⁵ Eugene Whelan with Rick Archbold, *Whelan: The Man in the Green Stetson*, (Toronto: Irwin Publishing, 1986), p.198.

⁷⁶ Allan MacEachen, Conversation with Author, September 2003. (Hereafter - MacEachen Interview)

⁷⁷ MacEachen Interview.

⁷⁸ Mitchell Sharp, Conversation with Author, February 2004.

Cabinet member Alastair Gillespie described the meeting as a “brutally candid examination of the PM.”⁷⁹

The trauma of having barely won a minority government in 1972 following the 1968 electoral landslide for the party was evident. Trudeau asked his caucus ‘Have we as a government run out of steam... Is it a question of leadership... Are we tired?’ Among strategic errors noted in Gillespie’s notes were: “the belief that good government [would] be recognized by the voters and rewarded with public support [and]... the belief that consensus decision making [was] the key to cabinet government.”⁸⁰ Gillespie confronted the Prime Minister and a key advisor Marc Lalonde over the size of the 30-member Cabinet that exacerbated the problem of finding consensus. He added that a large cabinet in reality led to: fragmentation; individuals speaking on topics in which they had little expertise; a thwarted leadership role for the Prime Minister; and, often, poor quality decisions due to the need for compromise.⁸¹

As early as 1976 Pitfield acknowledged that the process changes caused politicians to have to spend less time on traditional duties associated with departmental administration, meeting the public and representing their constituencies. However, speaking as a non-elected bureaucrat without any experience in elected office, he added that the making of effective policy was just as, if not more, important than the other duties.⁸²

Despite caucus criticisms Trudeau continued to maintain the importance of collective input and collective responsibility for cabinet decisions. Changes enacted at the

⁷⁹ Alastair Gillespie, “Notes: Meech Lake: ‘In Search of a New Mandate’, 17 November 1973,” (NAC: R1526 Alastair Gillespie Papers, Volume 19 File Caucus Weekend), pp.1-2.

⁸⁰ Gillespie, “Notes,” p.3.

⁸¹ Gillespie, “Notes,” pp.4-5.

⁸² Pitfield, “The Shape of Government,” p.13.

cabinet level to create a greater sense of collegiality and collective responsibility for governmental decisions were part of broader changes aimed at developing holistic policy thinking throughout the bureaucracy. Existing central institutions such as the Privy Council Office (PCO) and the Prime Minister's Office (PMO) were strengthened. In addition new horizontally minded institutions such as the Ministry of State for Science and Technology (MOSST), the Department of the Environment (DOE) and the International Development Research Centre (IDRC) were created.

Due to the close connection between systems thinking, cybernetics and the synergies that emerged between Club of Rome thinking and the Trudeau mandarins, a discussion of holistic systems thinking within the horizontal federal bureaucratic institutions, such as MOSST, has been deferred to chapter four. To conduct a discussion of those agencies before examining the emergence and promise of cybernetics and systems analysis, as discussed in chapter three, would be premature. Therefore the remaining part of this chapter looks at the DOE's and IDRC's creation. Both institutions reflect how the themes discussed in the last chapter on the emergence of new concerns in the international arena were manifested in Canada and led to their respective creation. The discussion of the IDRC introduces a further theme of the perceived importance of futures studies that will be discussed in subsequent chapters.

The Spread of Ecological Consciousnesses From the US Into Canada

Philosophy of Science Historian Peter J. Bowler stated that the emergence of a vibrant environmental movement in the 1960s was due to it being "a decade of protest

against established values.”⁸³ Canadian environmentalist Doug Macdonald and other authors have further argued that the tumultuous 1960s, from which the modern environmental movement emerged, was in part the result of an age of affluence in which a generation came to maturity that had never been exposed to the ravages of economic depression or war; a generation that had the luxury of considering quality of life issues, as opposed to mere survival.⁸⁴ It was a time when the modern use of the term “ecology” became integrally linked in popular parlance with the environment.⁸⁵

The Canadian environmental movement was strongly influenced by events in the United States where by the end of the 1960s “the environmental movement had developed into a major crusade.”⁸⁶ Canadians watched with interest in 1969 when President Richard Nixon created the Environmental Protection Agency (EPA) to enforce environmental laws, and on 22 April 1970 when the first official “Earth Day” was held.⁸⁷ Interested Canadians could also see the impact that the environmental movement was having on an American society and politics. For example, recycling programs emerged, car manufacturers had to adjust to using unleaded gasoline for fuel, and the electrical

⁸³ Peter J. Bowler, *The Earth Encompassed: A History of Environmental Sciences*, (New York: W.W. Norton & Company, 1993), p.516.

⁸⁴ Doug Macdonald. *The Politics of Pollution: Why Canadians are Failing Their Environment*, (Toronto: McClelland & Stewart Inc., 1991), pp.90-91.

⁸⁵ Historian Peter J. Bowler commented that the 1960s witnessed a distinctly political definition of the term “ecology” emerge that became inextricably linked to the environmental movement and its concerns. Bowler explained that the scientific discipline of “ecology” which emerged in the 1890s only referred to the study of “the interactions between organisms and their environment.”

Miller, *On Our Own*, p.321.

Bowler, *The Earth Encompassed*, p.504.

⁸⁶ Miller, *On Our Own*, p.326, p.329.

⁸⁷ Writer Barry Commoner described the day as “a sudden noisy awakening” and stated that “Everyone seemed to be aroused to the environmental danger and eager to do something about it.”

Miller, *On Our Own*, p.321.

American Commission on Intergovernmental Relations (ACIR), *The Federal Role in the Federal System: The Dynamics of Growth – Protecting the Environment: Politics, Pollution, and Federal Policy*, (Washington: American Commission on Intergovernmental Relations, 1981), pp.17-21.

Barry Commoner, *Closing the Circle: Nature, Man and Technology*, (New York: Alfred A. Knopf, 1971), p.5.

generation industry had to face increasing pressure from environmentally minded organizations.⁸⁸

Strenuous efforts on the part of academics, scientists and environmental campaigners would likely not have met with great success in the US or Canada had they not been accompanied by what Canadian political scientist Stephen Brooks referred to as a “cluster of conscious-raising events.”⁸⁹ Writers Brooks, Macdonald, and Harrison describe a series of major oil spills as being important awareness raising events. In the English Channel in 1967 the tanker *Torrey Canyon* went aground and spilled over 118,000 tons of oil. Two years later in 1969 over twenty miles of Californian coastline were devastated due to a massive oil spill and Ohio’s Cuyahuga River caught fire after another oil spill. The danger of oil spills in Canada struck home the following year in 1970 when a tanker, *Arrow*, spilled its considerable load into Nova Scotia’s Chedabucto Bay.⁹⁰

⁸⁸ A specific example of an industry besieged by emerging environmental concerns was the electrical generation industry. American electric industry expert Leonard Hyman commented that before the 1960s electrical generation tended to be predominantly associated with engineering and economic concerns. He added that “Alas, the simple life ended in the turbulent 1960s... The result was frustration, conflict and financial distress.”

During the late 1960s and early 1970s environmental agitation over the dangers of nuclear energy and ecological damage from the use of fossil fuels hindered the development of new power sources. A special issue of the journal *Electrical World* commented that by the early 1970s American utilities were being severely hindered by “wave upon wave of politically-motivated ‘we-are stricter-than-you’ city and state air-pollution regulations. They [environmentalists] were spurred on by federal legislation...” In addition, new environmental restrictions on the mining of coal and uranium negatively affected the American utilities.

Miller, *On Our Own*, p.320.

Leonard S. Hyman, *America's Electric Utilities: Past Present and Future: Third Edition*, (Arlington:Public Utilities Reports Inc.,1988), p.26.

-- "Generation", *Electrical World: The Electric Century 1874-1974*, (New York: McGraw-Hill Publication, 1 June 1974),p.96.

⁸⁹ Stephen Brooks, *Public Policy in Canada: An Introduction, Third Edition*, (Toronto: Oxford University Press, 1998), pp.247-248.

⁹⁰ Brooks, *Public Policy in Canada*, pp.247-258.

Macdonald. *The Politics of Pollution*, p.93.

Kathryn Harrison, *Passing the Buck: Federalism and Canadian Environmental Policy*, (Vancouver: UBC Press, 2000), p.56.

In addition to oil spills, reports of environmental devastation were emerging affecting a wide variety of concerns. Reports emerged that the Great Lakes, especially Lake Erie, were polluted with high levels of mercury and other toxins which resulted in large numbers of dead fish and other animals. On top of concerns for other creatures, reports of human population explosions with resultant famines and malnutrition in developing countries became increasingly common.⁹¹

By the late 1960s in Canada public interest in environmental matters had been piqued and numerous organizations whose purpose was to raise public interest in environmental matters and to pressure politicians and business to take action to protect the biosphere emerged. In 1969 in Ontario Pollution Probe began operating at the University of Toronto. The following year a group of Toronto-based law students organized the Canadian Environmental Law Association who worked to support groups such as Pollution Probe in legal matters and to help with lobbying.⁹² In addition to Canadian groups, international organizations such as the Sierra Club and the World Wildlife Fund began to establish or expand operations in the country.⁹³

Meanwhile at the federal level popular pressure was beginning to result in concrete policy initiatives during the first few years of the 1970s. During that time the Department of the Environment was created and five major pollution acts were signed into law including the Canada Water Act, the Clean Air Act and the Arctic Waters Pollution Prevention Act.⁹⁴ Prime Minister Pierre Trudeau who was an avid outdoorsman

⁹¹ Brooks, *Public Policy in Canada*, pp.247-258.
Macdonald. *The Politics of Pollution*, pp.93-96.

⁹² Macdonald. *The Politics of Pollution*, p.97-98.

⁹³ Harrison, *Passing the Buck*, p.62.

⁹⁴ Kathryn Harrison, "The Origins of National Standards: Comparing Federal Government Involvement in Environmental Policy in Canada and the United States," in Patrick C. Fafard and Kathryn Harrison (editors), *Managing the Environmental Union: Intergovernmental Relations and Environmental Policy in*

-a self-professed child of nature – took an active interest in environmental affairs and aided the environmental movement in Canada.⁹⁵ Former Minister of the Environment in the Trudeau Cabinet, Charles Caccia, once commented that Trudeau’s grasp of environmental policy issues was extensive and that “one never needed to have long discussions with the Prime Minister” on environmental matters.⁹⁶

According to political scientists Bruce Doern and Thomas Conway, Trudeau had his “environmental instincts” influenced by his love of the outdoors “and his early exposure to the work of the Club of Rome.”⁹⁷ They also noted that in the months leading up to the creation of the DOE in 1971 he had met with COR members on at least three occasions.⁹⁸ The COR’s quest to study and develop solutions to the Problematique had an essential environmental element attached to any deliberations and as such, it resonated with the broader themes that interested both Canadians in general, and their Prime Minister specifically, in the years surrounding 1970.

The COR’s belief in a deep sense of complexity and the need for cooperative approaches to global problems was also reflected by Trudeau’s opinion on environmental governance. In a speech in the House of Commons in 1970, the Prime Minister remarked that the struggle to protect the environment went “far beyond the capacity of one minister and his department. Indeed it cannot be waged effectively by the federal government

Canada. (Montreal: Institute of Intergovernmental Relations and Saskatchewan Institute of Public Policy, 2000), pp.56-59.

⁹⁵ Writer and canoeist James Raffan provides an interesting account of Trudeau’s image as “a paddler-politician” and how it reflected Trudeau’s broader approach to life and governance.

Pierre Elliott Trudeau, “The Ascetic in Canoe,” in Trudeau, *Against the Current*, p.10.

James Raffan, “A Child of Nature: Trudeau and the Canoe,” in Andrew Cohen, and J.L. Granatstein, (editors), *Trudeau’s Shadow: The Life and Legacy of Pierre Elliott Trudeau*, (Toronto: Random House of Canada Limited, 1998), pp.65-78.

⁹⁶ Charles Caccia, Interview, John English and Jason Churchill August, 2003.

⁹⁷ G. Bruce Doern, and Thomas Conway, *The Greening of Canada: Federal Institutions and Decisions*, (Toronto: University of Toronto Press, 1994), p.19.

⁹⁸ Doern and Conway, *The Greening of Canada*, p.20.

alone... or even just by Canada. It is a fight that must be waged by all ministers, all governments and all people.”⁹⁹ Trudeau hoped the newly created DOE would “lead the fight against pollution and to help coordinate the efforts of others,” in environmental matters.¹⁰⁰

Political scientists Bruce Doern, Thomas Conway and Kathryn Harrison identified the era of the early to mid-1970s when the DOE was established as a time of “growth [and] enthusiasm for ideas.”¹⁰¹ From the outset the DOE was to be holistic in approach.

Former Environment Minister John Roberts said:

The orientation of the new department was to be holistic: the management of Canada’s resources was to be undertaken not as a series of discrete programs dealing with individual sectors, but as shared aspects of the “environment,” a concept that reflected the interrelatedness of natural resources and their multiple use.¹⁰²

While COR’s holistic ideas may not have been the genesis of Trudeau’s opinions towards environmental matters, they were certainly in line with the Prime Minister’s thinking and with the general thrust of the logic behind the DOE’s creation.

The IDRC, Futures Studies and the Third World

As with the DOE’s creation, the International Development Research Centre’s (IDRC)’s emergence was both the result of popular concerns of the day and in its intellectual groundings reflected a dedication to holistic approaches to policy

⁹⁹ Trudeau, “Commons Debates,” (9 October 1970), p.35.

¹⁰⁰ Pierre E. Trudeau, “Commons Debates,” *House of Commons Hansard*, (9 October 1970), p.35.

¹⁰¹ Doern, and Conway, *The Greening of Canada*, p.12.

Harrison, *Passing the Buck*, p.55, pp.62-64.

Kathryn Harrison, “Intergovernmental Relations and Environmental Policy: Concepts and Context,” in Fafard and Harrison (editors), *Managing*, p.5.

¹⁰² John Roberts, “Managing the Environmental Challenge,” in Thomas S. Axworthy and Pierre Elliott Trudeau (editors), *Towards A Just Society: The Trudeau Years*, (Toronto: Penguin Books, 1992), p.196.

development. The story of the IDRC's creation provides a case study illustrating the merging of holistic thinking with a concern for futures studies that were fashionable both internationally and in Canada during the late 1960s and into the mid-1970s. In order to set the context for IDRC's creation it is necessary to examine Canadian concerns about the popularization of future studies internationally.

Future studies were a major growth industry around the world in the decades after World War II, especially in the 1960s. Future studies as aids to public policy development were already established in several developed nations. For example, the United States had a vast network of academic, government, military, and other futures studies associations that were publicly and privately funded. Federal advisor Ronald Ritchie argued that American organizations, such as the Hudson Institute, the Urban Institute, the Institute for the Future and Resources for the Future, represented cutting edge multidisciplinary research that used systems analysis to examine existing and future problems for society. The American government, the well financed and powerful Research and Development (RAND) Corporation and the Ford Foundation were key players in establishing the systems organizations.¹⁰³

American political scientist Victor Ferkiss' publication *Futurology: Promise, Performance, Prospects*, illustrated that American futurists had been involved at the highest levels of American government since the 1950s. He illustrated that government groups such as Central Intelligence Agency, the Internal Revenue Service and the Census Bureau were involved in futures studies. In addition, he argued that the Environmental

¹⁰³ Ritchie, *An Institute*, p.21.

Protection Agency and the Office of Technology Assessment were “essentially futurist in outlook.”¹⁰⁴

Outside the United States the influence of futurists varied, with substantial influence in countries such as Japan, West Germany, and France.¹⁰⁵ South of the United States in Latin America, Mexico and Argentina had established substantial futures research capabilities.¹⁰⁶ In addition sixteen European nations, including four Communist Bloc nations, were actively pursuing futures research.¹⁰⁷ In the Middle East and Asia, Israel, India, Japan and South Korea had national associations dedicated to futurology.¹⁰⁸ Ferkiss also made the observation that Third World nations did not appear interested in future studies and were often hostile to futurology. There was also a lack of technological advancement and contemporary issues of survival supplanted concern for subsequent decades. His conclusion was that the future studies movement was most popular in technologically advanced and affluent nations.¹⁰⁹

As an industrially advanced nation, some of Canada’s politicians, bureaucrats and industrialists became intrigued by the possibilities offered by futures studies. Future studies advocates, such as Senator Maurice Lamontagne and bureaucrat Ronald Ritchie, feared that if Canada did not take futures studies seriously there was a danger that the country would be left behind by the international community. The conception and development of the IDRC reflected the perceived importance for developing and

¹⁰⁴ Victor C. Ferkiss, “ 50: Futurology: Promise, Performance, Prospects,” *The Washington Papers Volume V*, (Beverly Hills: Sage Publications, 1977), p.28-29.

¹⁰⁵ Ferkiss, “ 50: Futurology,” pp.31-32.

¹⁰⁶ -- “Future Studies,” p.20, p.30.

¹⁰⁷ -- “Future Studies,” pp.19-25, p.27, and pp.29-36.

¹⁰⁸ -- “Future Studies,” pp.26-28.

¹⁰⁹ Ferkiss, “ 50: Futurology,” pp.31-32.

adopting a futures focus and a holistic approach to policy development and global problem solving.

The IDRC had its genesis with Prime Minister Lester B. Pearson's June 1967 speech to the Canadian Political Science Association. In that address he lamented that after twenty years of effort, the international community had learned what it could not do and little about what it could successfully do. Pearson also said there was a need to bring together politicians, political scientists and other experts in the establishment of a new centre to study international aid. The former Prime Minister said the challenge of international aid was discovering "new instruments for concentrating more attention and resources on applying the latest technology to the solution of man's economic and social problems on a global basis."¹¹⁰

The Prime Minister's idea began to be acted upon by senior bureaucrats. Over the next year they conducted extensive feasibility studies and contacted external experts for advice. In the September 1968 Throne Speech the Pierre Trudeau government officially announced its commitment to establishing the centre.¹¹¹ IRDC's purpose was to be supplemental to the work of other Canadian institutions such as Canadian International Development Agency (CIDA) to help identify "areas where both capital and technical assistance [were] likely to have the greatest impact on development."¹¹²

¹¹⁰ Lester B. Pearson, *Notes For The Prime Minister's Remarks To The Canadian Political Science Association Banquet at Carleton University, Ottawa, June 8, 1967*, <http://idrinfor.idrc.ca/archive/corpdocs/010474/Pearso5.pdf>, (accessed 6 July, 2004), pp.6-7.

¹¹¹ International Development Research Centre (IDRC), *International Development Research Centre of Canada*, (Ottawa: Government of Canada, 1969), <http://idrinfor.idrc.ca/archive/corpdocs/069849/02e.pdf>, (accessed 6 July, 2004), p.1.

¹¹² C.H.G. Oldham, *A Strategy For The Establishment Of The International Development Research Centre Of Canada: Working Paper 26 May 1969*, <http://idrinfor.idrc.ca/archive/corpdocs/117258/letters3.pdf>, (accessed 6 July, 2004), p.2.

The IDRC Steering Committee felt it was vital to utilize systems analysis and long-range research strategies to accomplish the goal of creating a more efficient foreign aid program. In their April 1969 report, the committee stated “with the system’s approach to the identification of problems and the search for solutions it has become feasible to use consciously our scientific and technological resources to induce and accelerate economic and social change.”¹¹³ Furthermore, the IDRC Steering Committee presented an argument that was later forcefully made in *The Limits to Growth* report about the indivisible link between current policy decisions and consequences years or decades hence. The Steering Committee report stated that decisions taken in the late 1960s would “pre-determine the policies and issues of the 1970’s and 80’s.”¹¹⁴

However the IDRC was limited in its success in developing internal futures capabilities. On the IDRC’s tenth anniversary its President Ivan Head continued to state: “Forecasting and planning will become essential elements in the Centre’s processes.”¹¹⁵ The IDRC’s lack of in-house futures activities were in part the result of its structure and mandate. Ninety per cent of its budget went to foreign research projects; by 1975 only \$4.5 million, had been granted to Canadian researchers. In contrast, developing nations had received \$45 million in funding.¹¹⁶ The result was the IDRC became a sponsoring organization to international futures groups and initiatives.

¹¹³ Steering Committee of the International Development Centre, *Report, 15 April, 1969*, <http://idinfo.idrc.ca/archive/corpdocs/047967/11.pdf>, (accessed 6 July, 2004), p.2.

¹¹⁴ Steering Committee, “Report, 15 April 1969,” p.3.

Donella H Meadows, Dennis L. Meadows, Jorgen Randers, and William W. Behrens III, *The Limits to Growth: A Report for the Club of Rome’s Project on the Predicament of Mankind*, (Washington: Potomac Associates, 1972).

¹¹⁵ Ivan Head, “Future Focus: Ultimately, the Focus Remains on People,” *IDRC Reports*, (Volume 9 Number 3, October 1980), p.13.

¹¹⁶ W. David Hopper, “Letter to Maurice Lamontagne, December 5, 1975,” (NAC: Ministry of State for Science and Technology, RG 102 Acc. 1984-85/520 Vol. 33, File 2120-S1-2 pt.1), p.2.

The IDRC contributed \$1,800,000 spread over twenty countries looking at the present and future possibilities of their science and technology policies. In addition it partnered with the American Ford and Rockefeller Foundations in the creation of the International Food Policy Research Institute. The IDRC's \$2,250,000 contribution to the institute helped provide funding for examining short, medium and long-term food problems and potential solutions for poorer nations.¹¹⁷

Given a commonality of interest it is no surprise to find a close relationship evolved between the IDRC and the Club of Rome, including its Canadian Association. COR and/or CACOR members such as Maurice Strong, Ivan Head, Rene Dubos, Omond Solandt and Rennie Whitehead played an influential role drafting the initial stages of the IDRC's development and operations during its formative years.¹¹⁸ Former IDRC President Ivan Head commented that he attended numerous COR meetings, read their reports and had semi-regular contact with members such as Alexander King, Aurelio Peccei and especially with Japanese COR member Sapuro Okita.¹¹⁹

Both the IDRC and COR/CACOR shared a strong belief in the similarity of domestic and foreign problems and issues. The IDRC argued that the process of implementing new policies, solving cultural conflicts and dealing with environmental pollution and urbanization were as relevant in the Canadian Maritimes and Western Canadian Indian Reserves as in Africa or Latin America.¹²⁰ Lessons learned in the far

¹¹⁷ Hopper, "Letter to Maurice Lamontagne, December 5, 1975," pp.2-3.

¹¹⁸ Steering Committee, "Report, 15 April 1969," p.i., p.54.

O. M. Solandt, "Testimony at Standing Senate Committee on Foreign Affairs, 17 March 1970," *The Senate of Canada: Proceedings of the Standing Senate Committee on Foreign Affairs (Second Session Twenty-eight Parliament, NO. 10)*, pp.10-9 to p.10-23.

IDRC, *IDRC Annual Report 1972-73*, (Ottawa, International Development Research Centre, c.1973), p.6, p.11.

¹¹⁹ Ivan Head, Conversation with Author, February 2004.

¹²⁰ Steering Committee, "Report, 15 April 1969," p.32.

reaches of the global village had potential applications at home. The close IDRC COR/CACOR relationship led in 1972 to IDRC providing \$112,500 to the Argentinean Bariloche Foundation to produce a mathematical world model reflecting the view of third world nations in response to the Club of Rome's *Limits to Growth* report. The initial results of the Foundation's project were presented at Club of Rome meetings in Tokyo in December 1973 with a more comprehensive report being presented in Vienna in September 1974.¹²¹

Conclusion

The closeness of the relationship between the COR/CACOR and the IDRC evolved due to a commonality of interests, attitude and agreement on the basic requirements to effectively deal with global issues. It was a similar process that allowed the COR/CACOR to develop a symbiotic relationship with the Trudeau government over its sixteen years in office. Key to that relationship was a common belief in the need for a holistic long-range approach to policy development. By the end of the 1960s and in the first years of the 1970s developments in cybernetics, systems analysis and futures studies made it appear that it was possible to both understand political issues in a holistic manner and to provide at least a modicum of understanding of the likely interconnections and consequences of policy decisions into the future.

The 1960s was a time of physical, intellectual and political tumult; it was a time of ideas when in Canada the term "change" became a mantra that permeated popular society and the country's political and bureaucratic elite. The election of Pierre Trudeau in 1968 initially satisfied a populist desire for political change. Once elected Trudeau brought to the next level incremental changes that had been occurring in the operation of

¹²¹ Hopper, "Letter to Maurice Lamontagne, December 5, 1975," pp.2-3.

the federal bureaucracy under the previous two Prime Ministers. The theoretical underpinning of the Trudeau style of public policy development was derived from the notion of functional policy development. At the end of the 1960s it was possible to still believe that a functional approach to politics was both possible and pragmatic due to the developments in the fields of cybernetics and general systems theory. It is to that story that the dissertation now turns its attention.

Chapter 3: The Antecedents to Influence (Part 3) – Systems Analysis to 1972

The holistic approach described in 1979 by its executive as “the Club of Rome way” could have easily been applied in the Canadian setting as the “Pierre Trudeau way.” Both sets of approaches placed a premium on the superiority of reason and its necessity in displacing passion when discussing issues of politics and policy. The Club of Rome (COR) asked if it was “possible to prime a rational discussion of the [energy] issue without getting led astray, one way or the other, by emotions?”¹ While this was referring to energy specifically, it was indicative of their overarching quest to address the interconnected problems facing humanity in the *Problematique*. The rationalist approach was also paramount with Trudeau who allegedly had the phrase “la raison avant la passion” hung on his wall at 24 Sussex Drive and, as discussed last chapter, was drawn to the deeply rational idea of functional politics.² Former Trudeau Cabinet Minister Donald Johnson commented on the Prime Minister’s “Cartesian reasoning,” and described his organizational style as “efficient, disciplined and precise.”³

It was a rejection of emotion and the quest for reason that led both the COR and Trudeau to develop an interest in cybernetics and systems analysis as holistic objective policy antidotes to *ad hoc* subjective policy development. This chapter delves into the development of the twin studies of cybernetics and systems analysis from World War II to the middle of the 1970s. It then explains how the COR members were initially drawn to such ideas and subsequently became key advocates of the use of systems analysis in policy development. The previous chapter mentioned the broad appeal of cybernetics and

¹ Maurice Guernier, Alexander King, Saburo Okita, Aurelio Peccei, Eduard Pestel, Hugo Thiemann and Victor Urquidi, “Foreword,” in Thierry de Montbrial, *Energy The Countdown*, (Oxford: Pergamon Press, 1979), p.x.

² Kevin J. Christiano, *Pierre Trudeau Reason Before Passion*, (Toronto: ECW Press, 1995), p.13.

³ Donald Johnson, *Up the Hill*, (Montreal: Optimum Publishing International, 1986), p.88.

systems analysis to Trudeau and other supporters of functional politics; this chapter explains how systems analysis ideas in the early Trudeau years began to infiltrate the bureaucratic decision-making process in Canada.

Cybernetics and Systems Theory Keys to Functional Public Policy Development

Cybernetics refers to an interdisciplinary movement that had its origins in the twentieth century modernization of Newtonian physics. In the initial decades of the last century American physicist Willard Gibbs found that at the molecular level Isaac Newton's laws of motion did not apply. His quest for an explanation led Gibbs to pioneer a new field of inquiry, statistical mechanics. In 1920 a cooperative venture featuring Gibbs working with French mathematicians Emile Borel and Henri Lebesgue led to the introduction of the idea of statistical probability in physics.⁴

Gibbsian disciple Norbert Wiener was drawn to the new ideas and grasped the broader significance.⁵ Wiener argued

Gibbs' innovation was to consider not one world but all the worlds which are possible answers to a limited set of questions concerning our environment. His central notion concerned the extent to which answers that we may give to questions about one set of worlds are probable among a larger set of worlds.⁶

Wiener's biographers further explained Gibbs' significance to the development of cybernetics. For him, the idea of probability meant two key things: "the probabilistic

⁴ Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society*, (Garden City: Doubleday Anchor Books, 1954), pp.7-11.

Flo Conway and Jim Siegelman, *Dark Hero of the Information Age: In search of Norbert Wiener The Father of Cybernetics*, (New York: Basic Books, 2005), p.88.

⁵ Wiener's biography, *Dark Hero of the Information Age*, notes that he considered reading Gibbs' work to have been 'an intellectual landmark in [his] life.'

Conway and Siegelman, *Dark Hero*, p.51.

⁶ Wiener, *The Human Use*, p.12.

world could not be pinned down with precision” and a probabilistic approach did not determine what events would happen, but what was likely to happen given “specific physical conditions.”⁷

The nineteenth century established that there were scientific laws that governed the operations of the entire universe. The early decades of the twentieth century ushered in the idea that in the actual, or physical world, it was not possible to get exact data and, therefore, it was not possible to arrive at exact answers to physics-related questions. Hence probabilistic tendencies supplanted deterministic results. Wiener argued that pre-twentieth century scientists ignored the inherent problem within Newtonian physics that “No physical measurements are ever precise.”⁸ However, the idea of probability meant that one could make statements with a high degree of probability of being correct and closely representing the actual. It also meant that there were numerous outcomes to any given phenomenon. As well, the belief that it was possible to identify the range of possible outcomes within established parameters emerged.⁹

Philosopher Keith Gunderson and mathematician Yehuda Rav argue that proponents of cybernetics viewed the relationship between their theoretical musings and reality as being akin to the relationship between geometry and actual geometric objects.¹⁰ By the middle of the twentieth century, Gibbs’ physics theories led to the dissemination of the idea of cybernetics.

⁷ Conway and Siegelman, *Dark Hero*, p.88.

⁸ Wiener, *The Human Use*, p.8.

⁹ Wiener, *The Human Use*, pp.7-9.

¹⁰ Keith Gunderson, “Cybernetics,” in Paul Edwards, (editor), *The Encyclopaedia of Philosophy Volume 2*, (New York: Macmillan, 1972), pp.280-283.

Yehuda Rav, “Perspectives On The History of the Cybernetics Movement: The Path to Current Research Through The Contributions of Norbert Wiener, Warren Mcculloch, and John von Neumann,” *Cybernetics and Systems: An International Journal*, (Volume 33, 2002), pp.779-781.

Beginning in the 1940s cyberneticists examined communication channels in the natural and artificial environments. Wiener and other cyberneticists drew a parallel with the universality of laws of physics in their belief that stability, or control, was a universal concept, applicable to the natural, human, and mechanized environments. Such control was inherently dependent upon the effective gathering and dissemination of information. It was a mechanized worldview that further argued that it was possible, through the study of informational channels; to create more effective organizations.¹¹ Cybernetics' main goal was to develop an appropriate language and techniques to effectively deal with issues surrounding control and communications.¹²

Cybernetic advocates foresaw the governance implications of a cybernetics revolution. Phrase-originator Norbert Wiener said he coined the term cybernetics after the Greek term for steersman from which evolved the political term governor.¹³ Furthermore he used a phrase that would have resonated with the COR and with Trudeau: "To live effectively is to live with adequate information."¹⁴ Wiener also made the key argument that in both biology and engineering, similar organizational and regulative processes were at work and tended to be governed by the idea of feedback. Feedback referred to information transferred from within a given system that subsequently affected its operations. In their biography of Wiener, *Dark Hero of the Information Age*, the authors claim that Wiener "established the universal principle of feedback as more than merely a

¹¹ As a result of its universality cybernetics subsequently influenced the development of a diversity of fields ranging from systems analysis to artificial intelligence.

-- "Cybernetics," in Alan Bullock, Oliver Stallybrass, Stephen Trombley and Bruce Eadie, (editors) *The Fontana Dictionary of Modern Thought*, (London: Fontana Press, 1990), p.197.

Gunderson, "Cybernetics," pp.280-283.

Rav, "Perspectives," pp.779-781.

¹² Wiener, *The Human Use*, p.17.

¹³ Wiener, *The Human Use*, p.15.

¹⁴ Wiener, *The Human Use*, p.19.

good technical idea.”¹⁵ As will be discussed in the next section, the idea of positive and negative feedback loops became critical to the development of systems analysis theory, especially in the World 3 Modelling Program that lay at the heart of the 1972 COR-sponsored work *The Limits to Growth*.¹⁶

General Systems Theory and Systems Analysis

Cybernetics’ overarching concern with the universality of processes and interactions led it to become a midwife to systems analysis. As a midwife, it provided systems theory with a link to the established Newtonian idea that there were laws that governed the operations of the universe. Cyberneticists took Newton’s universal physical laws and developed universal theories related to control and communications. The next evolution of the idea of the operations of universal processes emerged through systems analysis that holistically united the disparate biological, ecological, economic, and policy fields.

It was the idea of being able to link and study various phenomena that excited the Club of Rome. Systems analysis offered the hope of being able to study “the interwoven factors that [made] the contemporary world unstable, unpredictable and perilous,” i.e, the Problematique, in a methodological and scientific way.¹⁷ While the task was daunting, Peccei had a strong belief in the ability of an emergent field of computer-assisted systems analysis and global modelling to explain problems and to point to future difficulties.

¹⁵ Conway and Siegelman, *Dark Hero*, p.178.

¹⁶ Donella H Meadows, Dennis L. Meadows, Jorgen Randers, and William W. Behrens III, *The Limits to Growth: A Report for the Club of Rome’s Project on the Predicament of Mankind*, (Washington: Potomac Associates, 1972).

¹⁷ Aurelio Peccei, Daiku Ikeda, (edited by Richard L. Gage), *Before It Is Too Late*, (Tokyo: Kodansha International Ltd., 1984), pp.13-14.

Systems thinking became a lynchpin to the entire COR mission because the ability to understand the world's interrelated problems was essential. Effective political and economic tools to safeguard the future of humanity could not be developed in the absence of a holistic understanding of issues. The need was urgent and the stakes were high. According to Peccei, existing challenges could not have been “tackled with yesterday's ideas and methods, which already today are unable to stand the test... Society must learn to plan systematically.” He added, “The ever increasing conflict between rich countries and poor countries, and between reason and intolerance, cannot last long without causing serious prejudice to world peace.”¹⁸

The emerging field of systems analysis grew out of an interest in the 1950s associated with general systems theory being discussed by academics such as Ludwig von Bertalanffy and Kenneth E. Boulding. Two overriding concerns lay behind von Bertalanffy's and Boulding's work. The first was based upon traditional sciences, and the second upon emerging scientific endeavours. In part it was a reaction against the excessively mechanistic view of the world that had become dominant, at least in western thinking, from the Industrial Revolution to World War II. It was also in reaction to the emergence of academic sub-fields, such as biochemistry, organic-chemistry astrophysics, social anthropology, and post-modern historicism. Von Bertalanffy hypothesised that the mechanistic approach had been responsible for “the catastrophic crises of our times.” He further deduced that the future refinement of general systems theory could lead, albeit with limitations, to a more “organismic” view of the world and increase society's ability

¹⁸ Aurelio Peccei (General Chairman), *International Development 1967 International Technical Cooperation: Evaluation and Prospects*, (Dobbs Ferry: Oceana Publications, Inc., 1968),, p.1, p.6.

to adjust to the problems facing humanity.¹⁹ At best it was an early attempt to develop and synthesise phenomena common to various scientific disciplines into a general theory related to the world.²⁰ Boulding hoped that the theory would, in time, be able to develop a generalized language and framework that would “enable one specialist to catch relevant communications from others.”²¹

General systems theory explored many of the same key ideas and phenomena as were contained in the *Problematique*. Boulding commented that the ultimate hope was to “pick out certain general *phenomena* which [were] found in many different disciplines, and to seek to build up general theoretical models relevant to these phenomena.”²² Included in the list of common concepts were: populations, interaction between “an ‘individual’ of some kind with its environment”, and the “universal significance [of] growth.”²³

Information technology expert Jennifer Rowley commented: “Society and nature abound in systems”.²⁴ While von Bertalanffy’s and Boulding’s application of general systems theory was limited to looking at specific aspects within scientific fields, there was the hope that it could serve to create a more general “‘system of systems’” theory. However, Boulding argued that any overarching theory would not be able to bring an understanding of phenomena past the level of exploring basic open systems such as cells,

¹⁹ Ludwig von Bertalanffy, “General System Theory: A New Approach to Unity of Science – Problems of General System Theory,” *Human Biology*, (Vol.23, No.4., 1951), p.311.

²⁰ Bertalanffy, “General System Theory,” pp.302-303.

²¹ K. E. Boulding, “General Systems Theory: The Skeleton of a Science,” *Management Science*, (Vol.2., No.3., April, 1956), p.199

²² Boulding, “General Systems Theory,” p.200.

²³ Boulding, “General Systems Theory,” pp.200-201.

²⁴ Rowley provided a five-part definition of the term systems to explain its various manifestations that she summarised in the definition of a system as “being concerned with taking inputs or resources, executing some form of regulated change and achieving results or outputs.” She also acknowledged the operations of sub-systems that were defined as operating and integrally linked within larger systems.

Jennifer Rowley, *The Basics of Systems Analysis and Design for Information Managers*, (London: Clive Bingley, 1990), pp.1-2.

rivers and other self-contained systems. He added a word of caution that “in dealing with human personalities and organizations we are dealing with systems in the empirical world far beyond our ability to formulate.”²⁵

Initial attempts in the 1950s and 1960s to develop pragmatic applications of systems theory were associated with the United States Department of Defense, specifically with the Research and Development Corporation (RAND). In the context of the Cold War, the RAND Corporation was deeply involved in “[s]ystematically examining and comparing alternative courses of action in terms of their expected costs, benefits, and risks.”²⁶ By the mid-1960s systems analysis’s popularity was spreading to the civilian world as business people and others became interested and excited about the possibilities being presented by cybernetic analysis.²⁷ Spearheading the civilian application of systems research was Jay W. Forrester at the Massachusetts Institute of Technology (MIT), an electrical engineer by training.²⁸

²⁵ Boulding, “General Systems Theory,” pp.202-207.

²⁶ Paul Davis, “Analytic Methods,” in *50th Project Air Force, 1946-1996*, <http://www.rand.org/publications/PAFbook.pdf>, (accessed 2 November, 2003)

D. Gvishiani, *Organisation and Management: A Sociological Analysis of Western Theories*, (Moscow: Progress Publishers, 1972), p.369.

²⁷ Gvishiani, *Organisation and Management*, pp.369-370.

Stafford Beer, *Cybernetics and Management*, (New York: John Wiley & Sons, Inc., 1964), pp.xiv-xv.

²⁸ He was first exposed to systems during World War II where he worked with MIT feedback control systems pioneer Gordon S. Brown on the improved use of radar technologies for detecting defensive enemy aircraft on bombing raids. For the first decade after the war Forrester became heavily involved in the initial stages of developing computer technologies to be used in conjunction with existing radar technologies for North American air defences, such as the Semi-Automatic Ground Environment (SAGE).

The SAGE system became an integral part of the North American Air Defence (NORAD) project and made a major contribution to the development of civilian air traffic control systems. The system was used into the late 1970s.

Jay. W. Forrester, “The Beginnings of Systems Dynamics: Banquet Talk at the International Meeting of the System Dynamics Society Stuttgart, Germany 13 July 1989,”

<http://sysdyn.clexchange.org/sdep/papers/D-4165-1.pdf>, (accessed 16 August 2005), pp.2-4.

The Federation of American Scientists, *Semi-Automatic Ground Environment (SAGE)*, <http://www.fas.org/nuke/guide/usa/airdef/sage.htm>, (accessed 25 April, 2004).

Jay W. Forrester and Systems Analysis

It is not surprising that when the Club of Rome endeavoured to inquire into the causes and consequences of the world Problematique, they turned to a leading guru of systems analysis, Jay W. Forrester, for advice. Forrester believed that systems dynamics applied to “anything that [changed] through time... sweepingly, from physical systems through corporate systems into social systems, you find the same set of ideas apply.”²⁹ Forrester’s experiences in the 1950s and 1960s continually expanded the realm of systems analysis and created within him an abiding faith in its potential. Forrester became far more bullish on the possibilities of systems analysis than were his predecessors – von Bertalanffy and Boulding. He began to take systems analysis to the macro-level as he sought to reduce the entire operation of life on Earth to a series of interacting systems. Forrester said that his work, and that of his associates, was aimed at describing, “the dynamics of systems in general... principles cover systems in physics, engineering, management, economics, medicine, and politics.”³⁰ Forrester’s systems theory applied “equally well to controlling chemical processes, guiding space ships, and working out policies within our social systems.”³¹ He added that it was within “such a sweep of generality that one discovers the challenge and excitement of systems principles.”³²

In 1956 Forrester decided to move from dealing with questions of defence to tackling issues of management. MIT President James Killian enticed Forrester to join the recently established Sloan School of Management. From that base, Forrester began to

²⁹ David Allison, *Transcript Of A Video History Interview With Jay W Forrester, March 24, 1998*, http://www.cwheroes.org/oral_history_archive/jay_forrester/FORRESTER.pdf, (accessed 16 August 2004).

³⁰ Jay W. Forrester, “A Deeper Knowledge of Social System,” *MIT Technology Review*, (Volume 71 No.6, April, 1969), p.22.

³¹ Forrester, “A Deeper Knowledge,” p.22.

³² Jay W. Forrester, *Principles of Systems, Second Preliminary Edition*, (Cambridge: Wright-Allen Press Inc. 1971), p.(w1-1).

explore the synergistic potentials of incorporating engineering and computer technologies within management settings. An early foray into the emerging field led to the 1958 publication of the article “Industrial Dynamics – A Major Breakthrough for Decision Makers,” in the *Harvard Business Review* and laid the foundations for Forrester’s 1961 book *Industrial Dynamics*.³³

The next step for Forrester was in 1968 to move from management level problems to societal systems. Former Boston Mayor John. F. Collins worked at MIT as a visiting professor of Urban Affairs. His contact with Forrester led to a coordinated effort to apply systems analysis to the problems confronting major urban American centres at the time. Their efforts eventually led to the publication of a controversial text, *Urban Dynamics*, in 1969.³⁴ Forrester’s work in urban affairs also led to his first meeting with Club of Rome members, such as Aurelio Peccei, at a conference on urban problems at Lake Como Italy and the 1971 publication of *World Dynamics*.³⁵

What Forrester and his compatriots were advancing was a theory of everything that went beyond the physical world to unite the physical sciences and the humanities through discovering the basic principles that governed all systems.³⁶ Central to the emerging theory was a differentiation between open and closed (or feedback) systems.

³³ The story of *The Limits to Growth* is integrally linked to the father of systems analysis Forrester who pioneered research in the field and it was his student, Dennis Meadows that supervised the MIT project on the Club of Rome’s “World Problematique”. It was the *Industrial Dynamics* book that first piqued the interest of Dennis Meadows in the field of systems analysis and led him to apply to the Sloan School to conduct graduate research under Forrester’s supervision.

Forrester, “The Beginnings,” pp.5-7.

Jay. W. Forrester, *Industrial Dynamics*, (Cambridge, MIT Press, 1961).

Donella Meadows, “How The Limits To Growth Happened,” (Unpublished manuscript sent via email by Dennis Meadows, 24 December 2003), p.1.

³⁴ Jay. W. Forrester, *Urban Dynamics*, (Cambridge, MIT Press, 1969).

Forrester, “The Beginnings,” pp.7-8.

³⁵ Jay. W. Forrester, *World Dynamics*, (Cambridge: Wright-Allen Press, 1971).

Forrester, “The Beginnings,” pp.9-10.

³⁶ Forrester, *Principles of Systems* p.(1-4).

Open systems referred to traditional types of physical systems where the ultimate outputs have no influence on the initial inputs into the system. Open systems were non-historical in that the outputs were not dependent upon past actions to affect the future outcomes. Neither the past trips of an automobile, nor the operations of a watch, affected the operations of the systems.³⁷

It was the development of the theory of closed or feedback systems that laid the methodological foundations for *The Limits to Growth* report. Forrester defined the feedback system as “one in which an action is influenced by the consequences of previous action.”³⁸ The closed system applied to systems where inputs and outputs interacted with each other. There were two types phenomena at play within closed systems, negative and positive feedback loops where outputs became subsequent inputs into the system. The consequences of previous actions had a direct impact on future actions.³⁹

Positive feedback loops built upon previous outputs to produce further positive outputs. Forrester’s example was of bacterial growth where rates of growth were dependent upon previous established rates of bacterial growth.⁴⁰ Positive feedback loops tended towards exponential growth up to the limit of resources available. In a 1971 reprint of the 1968 textbook *Principles of Systems*, Forrester presaged the conclusions of the subsequent *Limits to Growth* report when he argued that positive feedback loops tending towards exponential growth had the potential to “reach overwhelming proportions if unchecked... But growth interacts with parts of the surrounding system to

³⁷ Forrester, *Principles of Systems* p.(1-5).

³⁸ Forrester, *Principles of Systems* p. (W1-5).

³⁹ Forrester, *Principles of Systems* p. (1-5).

⁴⁰ Forrester, *Principles of Systems* p.1-5.

modify the growth process.”⁴¹ Positive feedback loops invariably led to unstable and unsustainable exponential growth. Increases are initially steady and gradual but after a certain point become increasingly rapid. The positive feedback loop is represented in geometric terms by an upward parabolic curve.

Negative feedback loops referred to a system that attempts to adjust to a level imposed from outside the system.⁴² Forrester gave the example of a household heating system that continually sought to maintain a temperature and, as a result, its actions were directly related to previous outputs in terms of temperature. Failure to maintain the desired temperature caused a negative feedback where new outputs, in this case heat production, were required to re-establish room temperature.⁴³ Negative feedback loops strive for equilibrium and help to create more stable and sustainable processes. The consequences and outcomes of closed systems involving either positive or negative feedback loops could be determined via the use of computer modelling technology.

It was a time when computer technology was still in its infancy but was showing significant signs of promise. Computer advocates such as Norbert Wiener and Jay Forrester could see few, if any, limits to the future contributions from computer-based information technology.⁴⁴ Forrester believed in the superiority of computer modelling as compared to mental models due to the explicit nature of inputs and the mathematical

⁴¹ Forrester, *Principles of Systems* p. 2-121.

⁴² Forrester, *Principles of Systems* p.2-9.

⁴³ Forrester, *Principles of Systems* p.1-5.

⁴⁴ Dominican friar Père Dubarle commented that in viewing the world in cybernetic terms and humanity as being governed by sets of probabilistic rules, the possibility existed of establishing a society based solely on rationality. However, it also raised the spectre of a society being dominated, manipulated and controlled by rulers using probability machines. Wiener said that the fear of an individual or group of individuals using probability machines, as means of control of a larger population was not yet plausible and would not be for the foreseeable future. He argued that what continued to save society from such a situation was the fact machine lacked the ability to “account for the vast range of probability that characterises the human situation.”

Wiener, *The Human Use*, p.136, pp.178-181.

logic outputs from the models. In examining large and complex holistic issues as systems analysis did with multiple variants, equations and time frames, human reasoning could not match the inherent logic of computer programming.⁴⁵

Computer programming based on logical mathematical principles was the key-separating factor. Inputs went through a series of established equations to produce logical outcomes. Cybernetic systems analysis had the added advantage that the assumptions put into a model had to be identified by the programmer and therefore it was open to further discussions by peers. Critics could then subsequently adjust the input assumptions and test their results against initial results. Forrester did not maintain that computers were perfect. He did insist that when computer-based systems analysis was compared to other potential models that lacked clarity of assumptions with additional inherent problems of language and translation, systems was a superior mode of thinking and problem solving.⁴⁶ It was Forrester's established reputation and unwavering belief in the potential of computer modelling that attracted the attention of the Club of Rome.

Forrester, Meadows, the Club of Rome and *The Limits to Growth*

Forrester's ideas that related to the applicability of systems analysis to various global processes made it appear an ideal tool to be used to study the Problematique. Club of Rome (COR) members were united by a common concern for the future welfare of the world and its inhabitants. COR members such as Aurelio Pecei and Alexander King

⁴⁵ Jay Forrester, Conversation with Author June 2003. (Hereafter Forrester Interview.)

⁴⁶ Forrester continues to maintain the superiority of computer modelling to human constructed models that often contain inherent contradictions of assumptions and results. He said that at conferences he could present computer-derived findings and never contradict himself, whereas other presenters would not be able to get through a full presentation without raising questions of consistency and assumptions.

Forrester, *Principles of Systems* p. (3-3).

Forrester Interview

postulated that various ecological, political, social, and economic problems facing the world from the late 1960s to mid-1970s were interrelated. They further postulated that any solutions to the interrelated problems would require the use of holistic problem-solving approaches at a global level. Peccei claimed that one of the problems facing humanity had two parts. The first was the rapid ascent of humanity to complete dominance over nature. The second was a lack of adequate political institutions, arrangements and regulatory systems to deal with the resultant global problems. For him, traditional approaches and political structures served to exacerbate, not solve, global problems.⁴⁷

Systems analysis presented a non-traditional holistic approach to examine the interrelated problems facing humanity. It also offered the hope that a better understanding of existing problems could both lead to better political institutions and to the development of effective ameliorative measures. Forrester emerged on the COR radar at the right time, as by 1970 COR members came to the conclusion that their initial low-key meetings with various heads of state were insufficient to enact meaningful change and increase awareness.

The initial years of COR activity from 1968 to 1970 tended to be characterized by private, behind-closed-door meetings with various international political figures. Aurelio Peccei and the other core members such as Alexander King and Hugo Thiemann visited major cities of the world in North America, Asia, Eastern and Western Europe as well as holding consultations with numerous Third World nations. However, by 1970, Peccei and King began to become impatient with the lack of serious concern on the part of the

⁴⁷ Aurelio Peccei, Daiku Ikeda, (edited by Richard L. Gage), *Before It Is Too Late*, (Tokyo: Kodansha International Ltd., 1984), p.13.

groups they had met about the Problematique. They were also concerned with the lack of specific outputs to indicate that actions were in the process of being taken to address the interrelated problems that, according the COR, imperilled the future of the world.⁴⁸

While largely discouraged and frustrated, they continued to believe that it was possible to create a greater awareness of the Problematique and to catalyze the search for its requisite solutions. However, the search for solutions had to be grounded in sound scientific research and methodologies. COR executive member Eduard Pestel felt that it was necessary for the organization to establish “a quantitative model” by which to study the Problematique in order to attract the attention of policy makers who tended to pay “scant attention... to verbal statements of the Problematique.”⁴⁹

By 1970, the time had come to start the process of finding solutions. It was Massachusetts Institute of Technology (MIT) Professor and COR member Carroll Wilson who played an instrumental role in starting the process of developing scientific methodologies to address the Problematique. As Forrester’s colleague at MIT, Wilson introduced Forrester and his systems analysis ideas to the broader COR membership. Wilson arranged for Forrester to be invited to the June 1970 COR meeting in Bern, Switzerland.⁵⁰ The meeting had been held, in part, to discuss an offer from Germany’s Volkswagen Foundation to sponsor a COR institute to study the Problematique. Forrester

⁴⁸ Peccei and King claimed they received polite audiences as long as the vested interests of the group being addressed were not affected.

Aurelio Peccei, *The Human Quality*, (Oxford: Pergamon Press, 1977), pp. 66-67.

Alexander King, “The Club of Rome: A Case Study of Institutional Innovation,” in Pentti Malaska and Matti Vapaavouri (editors), *The Club of Rome*, (Turku: Finnish Society for Future Studies, 1984), p.5.

⁴⁹ Eduard Pestel, *Beyond the Limits to Growth: A Report to the Club of Rome*, (New York: Universe Books, 1989), p.22.

⁵⁰ -- “Activist on the World Stage: Carroll Wilson Remembered,” *The MIT Tech Review*, (February/ March 1984), pp.2-3. Viewed on 12 April, 2004 at: <http://entrepreneurship.mit.edu/Downloads/CLW-Activist.pdf>.

admitted that he felt like an outsider – “a dirty-American” - and stayed silent for the initial portion of the COR meeting.⁵¹

At the meeting, representatives from Volkswagen threatened to revoke its offer to fund a European-based institute due to a “lack of evidence of a feasible methodological approach.”⁵² It was at that point that Forrester stepped forward and said that he could provide the requisite research methodologies through the application of systems dynamics. Forrester presented the way he thought systems analysis could be of use in developing solutions to the Problematique. The members in Bern decided to have an extended meeting to discuss his approach; it lasted long into the night. As a result COR Executive members, such as Eduard Pestel, had their interest piqued by Forrester’s approach and decided to accept Forrester’s offer to visit MIT three weeks after the meeting for a two week concentrated study on systems analysis and its application to the quest for solutions to the Problematique.⁵³ Plans for the European agency were indefinitely suspended.

With only three weeks to prepare, Forrester was concerned that he did not have any concrete study to discuss with the COR executive or to use as the basis for a two-week seminar. However, on the plane trip back to the United States, Forrester was the sole passenger in the business-class section and decided to turn it into an impromptu office. There he used pencil and paper to map out a preliminary sketch of the global

⁵¹ Forrester Interview.

⁵² Pestel, *Beyond the Limits to Growth*, p.23.

⁵³ Forrester Interview

Dennis Meadows Interview.

Meadows, “How The Limits To Growth Happened,” p.4.

model that served as the conceptual foundation upon which the *Limits to Growth* was based.⁵⁴

Upon returning to the MIT campus Forrester found his new graduate student Dennis Meadows willing to take charge of the COR project. Meadows and his wife Donella had just returned from a yearlong trip to Asia and he did not have any academic commitments.⁵⁵ By the time the COR members arrived Forrester's preliminary sketch had developed into a larger model and simulations had been run showing an eventual collapse of the macro world system. Work was also underway to discover what stabilizing factors could be introduced to extend the system and to create a stable state of equilibrium.⁵⁶ The initial sketch became known as the World 1 Model, from which two subsequent models emerged. Forrester's subsequent book, *World Dynamics*, presented an expanded version of the model and was dubbed the World 2 Model. Meanwhile, the Meadows team referred to their computer modelling system as the World 3 Model.⁵⁷ It was more complex and involved additional equations to determine results.

At the end of the two week seminar the COR decided to entrust the preliminary work associated with its Project on the Predicament of Mankind to the Sloan School at MIT. After much emotional debate and controversy, it was decided that in lieu of a European-based agency, funding would be transferred across the Atlantic to MIT. Eduard Pestel's belief in the strength of Forrester's convictions led him to convince the

⁵⁴ Forrester Interview.

⁵⁵ In a similar manner to how both Pierre Trudeau and Aurelio Peccei were profoundly moved via visiting the developing world, the Meadows also returned from their trip inspired with a conviction to take action to improve the plight of the people in the developing world. At the same time Dennis Meadows mentioned that he and Donella were struck that despite the, by western standards, poverty, people seemed more content than many they knew in the developed world.

Meadows Interview.

⁵⁶ Meadows, "How The Limits To Growth Happened," p.5.

⁵⁷ Meadows, "How The Limits To Growth Happened," p.5.

Volkswagen Foundation to endorse the change in funding plans.⁵⁸ In lieu of the original, and more expensive European-based proposal, the Volkswagen Foundation donated over \$200,000 to the project. It was the first time that the Foundation had ever sponsored a non-European research program.⁵⁹ COR co-founder Alexander King said that the organization was seeking a “demonstration of a new technique for studying the interaction of the various factors within the Problematique.”⁶⁰

With the endorsement of the methodological concept of Forrester’s “new technique,” the stage was set for the subsequent *Limits to Growth* report. Dennis Meadows then assembled a team to do the macro-systems theory study examining the world as a single entity. However, as will be explained below, when the COR finally sponsored the publication of the MIT study in 1972 it was a substantially different type of report than Meadows and his technical team had envisioned.⁶¹

The initial months of the project were spent testing and elaborating the World 1 Model and seeking the proper quantifiable data to input into the computer models. The report was to have been a detailed scientific report replete with technical methodologies and data. Eight months into the project the COR asked for a progress report to be presented at a special COR meeting sponsored by the Canadian government and held at Montebello, Quebec in 1971. Dennis Meadows welcomed the meeting as he claimed that up to that point there had been substantial questions and misconceptions from COR members about the modelling project and its progress.⁶²

⁵⁸ Forrester Interview.

⁵⁹ Meadows, “How The Limits To Growth Happened,” p.5.
Pestel, *Beyond the Limits to Growth*, pp.24-26.

⁶⁰ Alexander King, “Email to Author, January 2004.”

⁶¹ King, “Email Correspondence.”

Meadows Interview.

⁶² Meadows Interview

Forrester accompanied the Meadows team to the meeting and gave a forceful presentation of his view that Problematique's substratum was, to quote Donella Meadows' recollection, "growth -- exponential growth of the physical economy and population against the earth's physical limits."⁶³ Forrester went on to claim that his conclusion was counterintuitive to prevailing concepts that held the belief that economic growth was the solution to the world's ills, and not its root cause. The key message that Forrester sought to relate was: there were physical limits that would eventually be met and humanity had to choose either to take pre-emptive action or nature would eventually impose change once limits were met. In the latter situation, there would be far fewer options available and little manoeuvring room in which humanity could adapt to the changed circumstances and realities.⁶⁴ The core message was initially lost on the COR members present. They continued to advocate growth solutions to global problems.⁶⁵

The initial discussions by the COR members at the Montebello meeting indicated to the Meadows team that many of the individuals at the meeting did not understand basic terms and/or had misconceptions about the project. As a result it was decided to write a brief ten-page memorandum listing in a non-technical manner the basic concepts and ideas associated with global modelling. Donella accepted the task of writing the circular

Meadows, "How The Limits To Growth Happened," p.6.

⁶³ Meadows, "How The Limits To Growth Happened," p.6.

⁶⁴ Meadows, "How The Limits To Growth Happened," p.6.

Jay Forrester re-iterated his convictions on the nature and impact of exponential growth in a phone interview. He commented that the same newspapers and journals that had dismissed the findings of the world modelling community ran simultaneous stories about, famines, climate change, wars of limited land space and too many people, such as in the Middle East. All of which were consequences of exponential growth on a finite planet.

Forrester Interview.

⁶⁵ Meadows, "How The Limits To Growth Happened," p.7.

Meadows Interview.

while other team members continued to develop and test the World 3 Model.⁶⁶

Meanwhile the preliminary conclusions that the Meadows team developed in 1971 were being discussed and evaluated at international conferences in cities such as Moscow and Rio de Janeiro. While criticisms and suggestions led to modifications to the models, the general approach of maintaining a global perspective continued.⁶⁷

However, it was through the process of preparing a general, non-technical report and defining key concepts for the COR members that the *Limits to Growth* was conceived. Response from COR members to the initial correspondence was replete with numerous comments, criticisms and, according to Dennis Meadows, further misunderstanding that made a second and more in-depth memo necessary.⁶⁸ The correspondence cycle was repeated. By the summer of 1971, Donella Meadows was circulating a fifty-page memorandum among COR members. It was designed to present the basic conclusions initially reached by Forrester about the problems of growth. It was a general, as opposed to a technical, report that presented the basic arguments and conclusions about the problems of growth without going into technical details about feedback loops or the computer modelling sessions.⁶⁹

As with most COR matters, Aurelio Peccei was the key critical voice in favour of the report. Dennis Meadows said that Peccei informed him and the COR that it was Donella's general overview that he wanted published as it had the ability to reach a broader and non-technical audience. Four years after the formation of the Club of Rome,

⁶⁶ Meadows Interview.

Meadows, "How The Limits To Growth Happened," p.7.

⁶⁷ Guillaume Vera Navas, "The First Report to the Club of Rome: How it Came About and its International Repercussions," (Unpublished Paper presented at the European Society Environmental History (ESEH) conference, Prague, 2-8 September 2003), p.3.

⁶⁸ Meadows Interview.

⁶⁹ Meadows, "How The Limits To Growth Happened," p.8.

Peccei was becoming impatient with the lack of popular awareness of the Problematique. In the general report, he perceived a popular accessible vehicle through which to deliver a clarion-call to the world that would convince people of the imminent need to adopt longer-range perspectives in their thinking and to ask ultimate questions about where the world was heading. He thought the report had the potential to engage the international community, at both the popular and elite levels, in a critical debate on the world's future course.⁷⁰

Donella Meadows commented that once he had decided that it was the report that the Club of Rome needed, Peccei "called, cajoled, arranged, suggested, pushed, persuaded, organized publications, translations, and presentations," drumming up interest in the forthcoming report.⁷¹ Dennis Meadows had assumed that the main publications would have been the technical reports with a general report later. However, Peccei's insistence on first publishing the general report reversed the order of release of the reports and caused the general report to be published more quickly than the Meadows team would have liked.⁷² Peccei initially wanted 5000 copies of the general report ready for distribution as quickly as possible.⁷³

In addition to Peccei's efforts, Dennis Meadows approached an academic press, Potomac Associates, in Washington to check for interest in publishing the report. Potomac agreed to publish the report and proceeded to take charge of building a publicity strategy to create a great deal of anticipation for the report's release in March 1972.⁷⁴

⁷⁰ Meadows Interview.

⁷¹ Meadows, "How The Limits To Growth Happened," p.9.

⁷² Meadows Interview.

⁷³ Meadows, "How The Limits To Growth Happened," p.9.

⁷⁴ Meadows Interview.

Meadows, "How The Limits To Growth Happened," p.9.

Peccei and Potomac combined to issue approximately 6700 complimentary copies that were “sent to the heads of state of all nations, all members of European Parliaments and the U.S. Congress, all U.S. state governors, all ambassadors to Washington and to the United Nations, and key journalists all over the world.”⁷⁵ Dennis Meadows became involved in media interviews and *Limits* related events such as a day-long symposium at the Smithsonian Institute which attracted a great deal of media attention including reporters from the *New York Times* and the academic magazine *Science*.⁷⁶

The plan worked. Media reports about the upcoming book appeared months ahead of the report’s formal release. News of the aims of the project began to circulate among the general public early in the project’s life. In July 1971, *Playboy* provided in-depth coverage of the June 1971 Club of Rome (COR) meeting and Forrester’s involvement. The article said the COR “represented the best analytical minds of the world, with considerable influence to make funds available if a promising approach could be found to stop the suicidal roller coaster man now rides on.” It went on to describe Dennis Meadows’ role “in what surely [had to] be the least dramatic attempt ever made to save the world.”⁷⁷

The report was also aided by the release in June 1971 of Jay Forrester’s *World Dynamics* that contained the World 2 modelling system. Despite the technical nature of the book, it attracted attention from around the world and from various sources ranging from the *London Observer*, *Christian Science Monitor* and *Wall Street Journal* to the

⁷⁵ Meadows, “How The Limits To Growth Happened,” p.9.

⁷⁶ Meadows, “How The Limits To Growth Happened,” p.10.

-- “New York Times Abstracts,” *New York Times* (3 March 1972), p. 41.

-- “News and Notes,” *Science*, (Volume 175, No. 4026, 10 March 1972), p. 1091.

Robert Gillette, “[The Limits to Growth: Hard Sell for a Computer View of Doomsday](#),” *Science*, (Volume 175, No. 4026, 10 March 1972), pp. 1088-1092.

⁷⁷ Richard M. Koff, “An End to All This: We have Handed Our Heirs an Ecological Time Bomb that Birth Control Alone Cannot Defuse,” *Playboy*, (July 1971), p.112, p.208.

decidedly non-academic popular journal *Playboy*.⁷⁸ The *World Dynamics* book argued an analogous message to the subsequent *Limits to Growth* text. The popularity of the Forrester book piqued public interest in the systems approach to world issues and, in part, set the stage for the media and academic frenzy that accompanied the Meadows' text nine months later.

Closer to the date of publication the more mainstream media also began to get interested. In January 1972 *Time* magazine carried the article "The Worst Is Yet to Be?" in anticipation of the release of the *Limits to Growth*.⁷⁹ Similarly, the lead up to the book's launch was covered by the *New York Times* as the paper began to run articles about its conclusions a month before the release of *Limits*.⁸⁰ Advance coverage was not limited to the United States. In the Netherlands, where thousands of advanced copies had been distributed, historian S.W. Verstegen commented that before the official release in March 1972, "two television documentaries had been broadcast and some important

⁷⁸ Forrester had been taken aback by the extent of popular interest and media coverage of the book. He had assumed that the "forty pages of equations" in the text would have guaranteed no public appeal, especially as the general public seemed to lack a clear understanding of computer generated graphs and reports.

Forrester Interview.

Forrester, "The Beginnings of Systems Dynamics," p.12.

⁷⁹ *Time* also provided subsequent coverage of the report. Six months after *Limits*' release journalist George Church asked in a subsequent edition of *Time* "Can the World Survive Economic Growth?" Similarly in October 1973 *Time* commented: "Of all the predictions of ecological disaster, none have sounded more persuasive—or alarming—than those put forth last year under the banner of the prestigious Club of Rome. Based on computer projections of the present rate of population and industrial growth, a team of scientists at M.I.T. forecast massive economic collapse and global epidemics by the end of the 21st century."

--"The Worst Is Yet to Be?" *Time*, (24 January 1972),

http://www.time.com/time/archive/preview/0,10987,905666,00.html#anch_ofie, (accessed 18 August 2005).

George J. Church, "Can the World Survive Economic Growth?," *Time*, (14 August 1972), <http://www.time.com/time/archive/preview/0,10987,906241,00.html?internalid=related>, (accessed 18 August 2005).

⁸⁰ -- "Information Bank Abstracts," *New York Times* (27 February 1972), http://web.lexis-nexis.com.proxy.lib.uwaterloo.ca/universe/document?_m=1ba963a64ef060fd123d58bc66d78548&_docnum=76&wchp=dGLbVtb-zSkVA&_md5=cb7b09ce438bc6c8d670878cb6034050, (accessed 18 August 2005), p.1.

newspapers and political magazines had published page-wide articles about the draft-report.”⁸¹

In 1972 the *Limits to Growth* also benefited from being written in a more popular style, and from being published at a time when environmental, ecological and economic concerns were coalescing.⁸² Historian S.W. Verstegen has commented that the

that publication happened against the background of the 'sixties'. Without the '1968' (student)-revolts in Paris, Amsterdam and Prague, without the Vietnam crisis, without the nuclear-arms race and the strong criticism against the American Military-Industrial Complex, the success of the *Limits to Growth* becomes incomprehensible.⁸³

The issues identified by Verstegen were, as previously discussed, also active in Canada and were part of the conscience-raising events such the 1970 oil tanker Arrow disaster in Nova Scotia and the impact of laundry phosphates on the environment in Ontario.⁸⁴ It was a time in which science, the environment and economics became fused into a vast popular and academic debate over the future of the country and more generally the world. From the impact of industrial pollutants in the Great Lakes, to the impact of pesticide use, to questions associated with the long term impact of nuclear waste and acid rain, Canadians were discussing the environment and economics as never before. Pollution Probe's Anne Wordsworth commented that vast public concerns in the 1960s

⁸¹ S.W. Verstegen, "Environmental Consciousness in the Netherlands and the First Report to the Club of Rome (1971-1983)," (Unpublished Paper presented at: European Society for Environmental History conference, Prague, 2-8 September 2003), p.2.

⁸² Meadows Interview.

⁸³ Verstegen, "Environmental Consciousness in the Netherlands," p.4.

⁸⁴ Brooks, *Public Policy in Canada*, pp.247-258.

Macdonald. *The Politics of Pollution*, p.93.

Kathryn Harrison, *Passing the Buck: Federalism and Canadian Environmental Policy*, (Vancouver: UBC Press, 2000), p.56.

Jennifer Read, "Let Us Heed the Voice of Youth": Laundry Detergents, Phosphates and the Emergence of the Environmental Movement in Ontario," *Journal of the Canadian Historical Association*, (Volume 7, 1996), pp.227-250

and 1970s had “prompted the discovery and study of many complex and unresolved problems.”⁸⁵

1972 also proved to be an opportune year to release a book meant to spark a global debate on matters of economic growth and the ecological future of Earth. It was the year of the United Nations Environment Conference on the Human Environment in Stockholm, Sweden, where the concept of sustainable development was first mentioned. The UN’s World Commission on Environment and Development subsequently defined the term as development meant to meet contemporary needs “without compromising the ability of future generations to meet their own needs.”⁸⁶

The *Limits to Growth* illustrated in graphic terms that the world was interconnected, that it was possible to perceive likely consequences of contemporary action on the future, and that existing attitudes and practices regarding unfettered economic growth were not sustainable over the long term. Traditional attitudes towards economic growth and expansion were imperilling the future of all of humanity.⁸⁷ Within Canada the Meadows report added to the ongoing debate being conducted by concerned groups such as Pollution Probe and the Canadian Environmental Law Association.⁸⁸ The

⁸⁵ Anne Wordsworth, Debra Henderson, Jan Marmorek and Chris Conway, “Pollution Probe Reviews the Decade,” in Anna Porter and Marjorie Harris (editors), *Farewell to the 70s: A Canadian Salute to a Confusing Decade*, (Don Mills: Thomas Nelson & Sons (Canada) Limited, 1979), pp.151-155.

⁸⁶ Gro Harlem Brundtland, (Chairman), *Our Common Future: World Commission on Environment and Development*, (Oxford: Oxford University Press, 1987), p.8.

Chris Patten, “On Governance,” *BBC Reith Lectures 2000*, http://news.bbc.co.uk/hi/english/static/events/reith_2000/text1.stm, (accessed 20 June 2005).

⁸⁷ In an argument similar to that made in *The Limits to Growth*, the Brundtland Report also said that “painful choices” ultimately had to be made and that the concept of sustainable development was dependent upon “political will.”

Brundtland, (Chairman), *Our Common Future*, p.9.

⁸⁸ Wordsworth, et al., “Pollution Probe,” pp.151-155.

The Canadian Environmental Law Association (CELA), “Who We Are,” <http://www.cela.ca/whoweare/index.shtml>, (accessed 15 October 2005).

Mark Winfield, “The Horizontal Issue: The Environmental Policy Experiences of Alberta and Ontario, 1971-1993,” *Canadian Journal of Political Science*, (Volume 27, No.1, March 1994), pp.130-134.

Meadows report provided visual representations of data through graphs that presented a complex argument in an accessible manner that resonated with individuals who had had misgivings about the relationship between humanity and the environment.⁸⁹ As well, the report gained credibility because it was produced by one of the world's leading technical research universities, MIT, and it was sponsored by an organization of internationally renowned business leaders, academics and bureaucrats, the Club of Rome.⁹⁰

Furthermore in the year subsequent to its release, the Middle East Oil Crisis provided a proof of concept in terms of how the fate of the developed world was integrally linked to external forces in the developing world. Due to its integral connection to the industrial economy, questions of energy use and supply could not be examined in isolation. In 1973 the Organization of Petroleum Exporting Countries (OPEC) decided to restrict oil production in order to inflate prices. This precipitated an energy crisis and moved the fears and concerns of many in the environmental, ecological and associated communities from the realm of theoretical concern to pragmatic reality. Ecologist and historian Anna Bramwell said that the crisis was “a vindication of economic ecologism,” and that it led to a “fusion of green values with resource fears.”⁹¹ COR

⁸⁹ Meadows Interview

⁹⁰ Similar in intent to Rachel Carson's book in 1962, *The Limits of Growth* was meant to shock a largely ignorant public into awareness of potential future dangers associated with contemporary practices. Like *Silent Spring*, the Meadows' work demanded a response from the broader public and vested interests and it was meant to inform, pique interest and start a debate about the fundamentals of humanity's relationship with its surroundings. Throughout the text the authors continually qualified their arguments by insisting that the work was preliminary and that its conclusions were arrived at using nascent technology. They also hoped the book would “serve to interest other people, in many fields of study and in many countries around the world, to raise the space and time horizons of their concerns.” Added to the invitation to join in the research was a dire warning that ignoring the inherent problems of exponential growth on a finite planet would be perilous and increase the risk of global collapse. The conclusion stated that it was not likely that rates of growth could have been maintained for another century and that if humanity waited until the consequences of hitting physical limits became evident “it will have waited too long.”

Meadows Interview

Meadows et al. *The Limits to Growth*, p.29, p p.187-188.

⁹¹ Anna Bramwell, *Ecology in the 20th Century: A History*, (New Haven: Yale University Press, 1989), p.212.

member Umberto Colombo said that the Crisis seemed to “confirm that the excessive exploitation of non-renewable resources was triggering serious problems.”⁹²

The strains of exponentially increasing population and industrial activities on a finite planet were leading to an uncertain future. The Meadows team stated “with some confidence,” that without any change in how the world conducted its affairs “population and industrial growth will certainly stop within the next century, at the latest.”⁹³ However, the report was not meant to be an exercise in pessimistic clairvoyance. The Meadows team found hope in two key developments. The first was the Green Revolution of the 1960s and 1970s that increased global crop yields.⁹⁴ The second was the global spread of birth control, especially “the pill,” to the developing world. The report’s authors insisted that there remained optimism for the future. Humanity could use its collective “ingenuity and social flexibility” to change the future; the missing ingredient was collective political will.⁹⁵

⁹² Umberto Colombo, “The Club of Rome and Sustainable Development,” *Futures* (Volume 33, 2001), p.8.

⁹³ Meadows et. al. *The Limits to Growth*, p.132.

⁹⁴ The use of the Green Revolution is dubious at best. For a time in the 1960s and 1970s the Green Revolution kept food supply ahead of population growth in the developing world. But the revolution was not without its costs. Concentrating on monoculture and concentrating agricultural growth had numerous adverse impacts such as a relative loss of biodiversity, soil erosion, lowering of water tables that ultimately reduced agricultural productivity. In addition technology transfer may have initially helped local farmers, but it disrupted traditional practices that were often more ecologically sound and made them dependent on foreign technologies and supplies such as oil. An important element in the “success” of the Green Revolution was the use of pesticides and fertilizers that in subsequent years created their own problems.

Meadows et. al. *The Limits to Growth*, p.86, p.134.

Joshua S. Goldstein, *International Relations, Third Edition*, (New York: Longman, 1999), p.504, pp.580-581.

The Commission on Developing Countries and Global Change, *For Earth’s Sake*, (Ottawa: International Development Research Centre, 1992), pp.21-22.

⁹⁵ Technological advancement and changing attitudes were not guaranteed to solve interconnected problems and came with inherent tradeoffs. For example the Meadows’ team held out the hope that in time nuclear energy would supplant dependence on fossil fuels and eventually ease CO2 levels in the atmosphere “before it had any measurable ecological or climatologically effect.” The nuclear option was also problematic to the Meadows’ team because the nuclear industry had not been able to determine how to effectively discard waste from nuclear reactors. The nuclear alternative became increasingly problematic

Dennis and Donella Meadows and their team illustrated that solving one or two specific problems within the interconnected global system was insufficient to “solve” the inherent problems of growth on a finite planet. For example, in an ideal situation with clean unlimited energy source being produced, pollution levels at minimal levels, optimum levels of food production in operation and effective birth control, there would still be a collapse and an end to growth before 2100. Land would become exhausted and resources, no matter how efficiently extracted, would eventually run out. The resultant food shortage would be accompanied by a rise in pollution levels that would, in turn, reduce food availability levels. The conclusion reached in *The Limits to Growth* was that technological advances could improve relative living conditions and “prolong the period of population and industrial growth” but would not be able to remove “the ultimate limits” to growth.⁹⁶

The conclusion of *The Limits to Growth* presented scenarios in which growth continued, in a more limited capacity, to produce a stable world existing in a state of equilibrium. In such a situation, there would be an exchange of freedoms. People would have to give up rights to unlimited offspring and the untrammelled consumption of natural resources. In exchange, people could gain freedom from hunger and poverty, plus

after the Three Mile Island nuclear plant meltdown in Pennsylvania. Twenty years on the *Washington Post* commented that the event became “a rallying symbol for the anti-nuclear movement.” It added that the nuclear industry had “not built a single new plant in the United States since 1979.” Previous to the event American utilities were focussed on the nuclear option as a major source of new electrical generating capacities.

Meadows et. al. *The Limits to Growth*, p.86, p.134.

Mark Stencel, “20 Years Later A Nuclear Nightmare in Pennsylvania,” *Washington Post*, (March 27, 1999), <http://www.washingtonpost.com/wp-srv/national/longterm/tmi/tmi.htm>, (accessed 29 April 2004).

-- "Generation", *Electrical World: The Electric Century 1874-1974*, (New York: McGraw-Hill Publication, 1 June 1974),p.96.

Leonard S. Hyman, *America's Electric Utilities: Past Present and Future, Third Edition*, (Arlington: Public Utilities Reports Inc.,1988), p.87, p.97 and p.105.

⁹⁶ Meadows et. al. *The Limits to Growth*, p.148.

gain greater educational and leisure opportunities.⁹⁷ While utopian in tone, the image presented was a world in which the various interconnected-problems facing the world were effectively managed and the future was safeguarded. The Meadows' team concluded that while there was "cause for deep concern, there [was] cause for hope." There was still time and humanity had at its disposal "the most powerful combination of knowledge, tools and resources the world [had] ever known." What was missing was a long-term goal for humanity and the will to move humanity down that road.⁹⁸

The success of the *Limits* publication was evident in October 1973 when *Time* magazine commented:

Of all the predictions of ecological disaster, none have sounded more persuasive—or alarming—than those put forth last year under the banner of the prestigious Club of Rome. Based on computer projections of the present rate of population and industrial growth, a team of scientists at M.I.T. forecast massive economic collapse and global epidemics by the end of the 21st century.⁹⁹

The combination of an aggressive marketing plan, the use of novel technology (the computer) in presenting a dire warning about the future of planet earth and external conscious-raising events and crises served to make the *Limits to Growth* one of the most widely read books of the twentieth century. It was translated into thirty-seven languages and sold over 12 million copies.¹⁰⁰

Influential Canadians including Trudeau political advisor Ivan Head, Trudeau Cabinet Minister Allistair Gillespie, *Globe & Mail* Publisher Roy Megarry, and the founder of the Foundation for International Training (FIT) in Toronto Ranjit

⁹⁷ Meadows et al. *The Limits to Growth*, p.184.

⁹⁸ Meadows et. al. *The Limits to Growth*, p.188.

⁹⁹ -- "Delaying Doomsday," *Time*, (15 October 1973), <http://www.time.com/time/archive/preview/0,10987,910822,00.html?internalid=related>, (accessed 22 August 2005).

¹⁰⁰ Navas, "The First Report to the Club of Rome," p.3.

Kumar, all commented that their initial reaction to the work was to think of it as one of the most important books ever written.¹⁰¹ In terms of grabbing international attention and catalyzing debate, the first Club of Rome-sponsored report was a resounding success.

Despite a lack of agreement about arguments and implications, the COR Executive were generally pleased with the report's impact.¹⁰² *The Limits to Growth* had illustrated that systems analysis could be used as a methodological tool to examine the Problematique and the report stimulated a global debate that the COR had hoped to initiate.¹⁰³ Executive member Eduard Pestel has commented that modelling systems could not predict the future, but could inform the future.¹⁰⁴

Alexander King said that the COR executive felt that "it was the report [the COR] had originally asked for, namely the demonstration of a new technique for studying the

¹⁰¹ Ivan Head, Conversation with Author, February 2004. (Hereafter: Head Interview).

Allistair Gillespie, Conversation with Author June 2004. (Hereafter Gillespie Interview).

Roy Megarry, Conversation with Author, May 2004. (Hereafter Megarry Interview).

Ranjit Kumar, Conversation with Author, January 2004. (Hereafter Kumar Interview).

¹⁰² Given the diverse nature of COR members it was not likely that there would ever be unanimous agreement on such a controversial topic as global growth. From the early stages of the Meadows' report, COR members had been expressing both support and strong reservations. The main author of the book, Donella Meadows, relates that the correspondence she had from COR members after the 1971 Montebello meeting was, "a foreshadowing of what the world's reaction would be. Some members of the Club were elated by the general report. Some were horrified." COR member Eduard Pestel, in the year preceding the report's publication, thought the report was a useful popularizing tool, but, conceded the inherent problems of using novel methodologies to approach existing complex problems. Pestel said that while it was meant for an educated, but non-technical audience, it had to have the ability to withstand the vigour of scientific review.

Meadows, "How The Limits To Growth Happened," pp.8-9.

King, "Email Response."

¹⁰³ The Commentary epilogue written by the Executive at the end of the report stated that the group had two key objectives that were met. The first was to examine the limits to the world system and the constraints it placed on human activity. The second objective was to provide warnings to humanity if existing trends were allowed to continue into the future.

Alexander King, Saburo Okita, Aurelio Peccei, Eduard Pestel, Hugo Thiemann and Carroll Wilson, "Commentary," in Meadows et. al. *The Limits to Growth*, p.189.

¹⁰⁴ Pestel, *Beyond the Limits to Growth*, p.37.

interaction of the various factors within a Problematique.”¹⁰⁵ He added that it was “prophylactic futurology,”¹⁰⁶ and “not an exercise in doomsterism.”¹⁰⁷ As well, Aurelio Peccei described the report as a pioneering success that clearly demonstrated “*material growth cannot go on forever.*”¹⁰⁸ Japanese COR Executive member Saburo Okita commented that despite the criticisms, “the idea of ‘limits’ shocked people into an awareness that they could not continue to think of the earth as an unlimited source for exploitation by man.”¹⁰⁹ Hugo Thiemann went so far as to claim that it was the COR’s most valuable contribution to the world as it “created worldwide awareness of environmental problems (Rio, Kyoto, Johannesburg).”¹¹⁰

Systems Analysis and Functional Politics Canadian Style

Trudeau advisor Ivan Head stated that when the *Limits to Growth* was published “it created quite the stir,” not because of its arguments but rather due to the new policy planning possibilities suggested by the use of systems analysis. He claimed that individuals such as Jim Davey within the Prime Minister’s Office (PMO) and C.R. Buzz Nixon within the Privy Council Office (PCO) understood and discussed the possibilities offered by systems analysis.¹¹¹ Political scientist Richard French commented that within the federal public policy framework of the late 1960s and early 1970s, traditional areas of expertise such as economics and

¹⁰⁵ King, “Email Response.”

¹⁰⁶ King, *Another Kind of Growth* p.13.

¹⁰⁷ King, “Email Response.”

¹⁰⁸ Italics were in the original quote. The message flew in the face of traditional opinions and Peccei felt fortunate that it was “no longer habit to burn heretics at the stake.”

Peccei, *The Human Quality*, pp.84-85.

¹⁰⁹ Saburo Okita, *Japan’s Challenging Years: Reflections on My Lifetime*, (Sydney: George Allen & Unwin, 1983), p.82.

¹¹⁰ Hugo Thiemann, Email Correspondence with Author, February 2004.

¹¹¹ Ivan Head, Conversation with Author, February 2004.

political science were augmented by a “a group of “horizontal” disciplines – cybernetics and modelling, technological forecasting and futurology – which attempted to knit together the concerns of the traditional disciplines.”¹¹²

Prime Minister Trudeau and key policy advisors were drawn to the methodology and thinking process advocated by the Club of Rome rather than any specific arguments presented in *The Limits to Growth*. It was the need for a new approach to politics and economics that piqued interest in the organization. In 1976 US Ambassador to Canada Thomas Enders “was struck” by the fact that while Trudeau “explicitly disavow[ed] *The Limits to Growth*,” the Prime Minister referred “frequently to Club of Rome thinking on the need for new political and moral approaches.”¹¹³

Canadian political scientists including James Fleming, Donald Savoie, G. Bruce Doern and others argue that under Trudeau, the power of horizontal central agencies – especially the PMO and PCO – gained greater strength and became integral to the policy making process.¹¹⁴ As well the centrality of the Treasury Board to the policy process was maintained. Trudeau advisor Michael Pitfield said that the Treasury Board fulfilled a crucial role in ensuring that programs and objectives were closely linked so that “the government’s policy levers [were] in fact connected with the rest of the machine.”¹¹⁵ Some bureaucrats from the strengthened central institutions, such as Jim Davey, C. R. Nixon, Michael

¹¹² Richard D. French, *How Ottawa Decides: Planning and Industrial Policy Making 1968 – 1984*, (Toronto: James Lorimer & Company, Publishers, 1984), p.19.

¹¹³ Thomas Enders, “Department of State Telegram, Subject: Conversation with Trudeau August 1976,” (Gerald R. Ford Library: L. William Seidman, Assistant To The President For Economic Affairs; Executive Director, Economic Policy Board: Files, 1974-77: Box 224 File 7660247 - Ambassador Enders), p.1, p.3.

¹¹⁴ James Fleming, *Circles of Power: The Most Influential People in Canada*, (Toronto: Doubleday Canada Limited, 1991), p.25.

¹¹⁵ Pitfield, “The Shape of Government,” p.14.

Pitfield and others attended meetings with COR individuals, and/or attended conferences hosted by the Canadian Association for the Club of Rome (CACOR). From such meetings and presentations as well as subsequent papers that were made available, the possibilities of applying systems analysis approaches to policy development were examined.¹¹⁶

The man most responsible for the radical changes to the operation of the civil service was Michael Pitfield, a CACOR member, who was described by political scientist Nicole Morgan as “a young alter ego of the Prime Minister himself.”¹¹⁷ His bureaucratic obsessions with transforming the public policy process reflected the views and attitudes of the Club of Rome. According to Morgan, the Pitfield-Trudeau approach to a rationalized civil service had three key elements. The first was a belief that it was possible to rationally plan the future based upon “an analytical understanding of society.” Second that it was possible to rationally coordinate all bureaucratic activities. And third

¹¹⁶ Head Interview.

French, *How Ottawa Decides*, p.22.

King Response.

Hugo Thiemann, “Email Correspondence 5 April 2004.”

Fred G. Thompson, “Note to Staff of PCO/PMO/FPCO, 15 December 1978,” Material supplied by J. Rennie Whitehead from personal archive.

-- “Appendix: Third Annual Conference – Ottawa, 9 & 10 May, 1977, Canadian Association for the Club of Rome,” (CACOR Archives: File 5008: *CACOR Newsletter*, Sept. 1977), pp.1-4.

Conference Organizing Committee, “Canadian Conference on Global Modelling April 26-27 1978: Summary of Proceedings,” (CACOR Archives: File 206: Canadian Conference on Global Modelling Summary of Proceedings, Report to CACOR), pp.22-28.

¹¹⁷ Trudeau cabinet minister Donald Johnson commented that Pitfield “did not hesitate to speak unctuously in the name of the Prime Minister.” Johnson said that he was never able to fully discern if Pitfield always directly carried out Trudeau’s wishes or if the Prime Minister was indifferent and content to allow Pitfield to decide upon matters independently. Either way Pitfield enjoyed Trudeau’s full confidence and acted accordingly.

Morgan, *Implosion*, p.67.

Johnson, *Up the Hill*, p.89.

there was a strong need to recruit fresh individuals with “new ideas” to the civil service.¹¹⁸

Conclusion

As mentioned in this chapter and further developed in the subsequent chapters, holistic and interrelated thinking permeated public policy development in the Trudeau era. The Prime Minister and his key advisors sought to ensure that government objectives were clearly identified and that policies were closely related to objectives.¹¹⁹ Pitfield lamented that in the mid-1970s a lack of holistic thinking on policy issues remained and that people still failed to view government “as a total system.” He went on to claim that often policies were viewed in isolation and that politicians, bureaucrats and the general public, “increasingly lose sight of the comprehensive web of inter-relationships.” The problem with the lack of holistic thinking was that it often led to “erroneous analysis, inappropriate and wasteful prescriptions.”¹²⁰

However, horizontal, holistic approaches to policy development used vast quantities of time, energy, and personnel and often failed to result in concrete policy

¹¹⁸ Within the Canadian federal public policy nexus, the horizontal approach to policy development came to transcend such ideas and became increasingly complex as the idea also became associated with the idea of consensus building on the part of “stakeholders”. Canadian bureaucratic expert Donald Savoie has argued that the approach opened the door to a plethora of interest groups, “think tanks,” lobbyists and consultants becoming heavily involved in the process and supplanting the traditional roles of career civil servants.¹¹⁸ Savoie identifies the transformation in the public policy process to the greater role for public research institutes and private interests as being part of the general decline in the power influence of the Canadian civil service from the 1970s to the current day.

The horizontal approach of systems advocates such as the Club of Rome, placed emphasis on policy outputs and the potential implications of policy decisions; the horizontal approach that evolved in Canada emphasised policy inputs and building consensus among disparate interests. Whether an intentional outcome of policy or not, within the Trudeau bureaucratic reforms the two approaches to horizontal policy development both emerged and diverged. Savoie comments that Trudeau had demanded his civil servants explore all possible policy options; however that quest opened the door to external consultations and the search for various truths.

Morgan, *Implosion*, p.68.

Donald J. Savoie, *Breaking the Bargain: Public Servants, Ministers, and Parliament*, (Toronto: University of Toronto Press, 2003), pp.8-10, p.123.

¹¹⁹ Pitfield, “The Shape of Government,” p.11.

¹²⁰ Pitfield, “The Shape of Government,” pp. 19-20.

outputs. Moreover the time required was not conducive to rapid policy development meant to attract popular attention and electoral support. Important Trudeau Cabinet Ministers such as Allan MacEachen, Eugene Whelan and others came to question the ultimate utility of Trudeau reforms to the cabinet meeting and decision-making system within the federal government. There were also concerns expressed about the relative lack of concrete policy outputs for the general public that would signal an active government. Minister MacEachen expressed his opinion that the contrast between the volume of policy initiatives during the minority government of Lester B. Pearson and the relative lack of legislative outputs during the first Trudeau majority government was a key reason for the Liberal's electoral difficulties in 1972.¹²¹

While there were complaints from within cabinet and there were election difficulties, Trudeau remained committed to holistic and rational public policy development. The following two chapters illustrates how that commitment played itself out in various federal departments and agencies.

¹²¹ Rock Demers and Kevin Tierney (Producers), "The Art of Governing 1968-1972," *Pierre Elliott Trudeau, Memoirs*, (Volume 2: Episode 3), Markham: Les Productions La Fete/ Polygram Video, 1994.

Chapter 4: The Spread of Influence (Part 1) – Systems and the Horizontal Axis of Power 1968-1978

The previous two chapters dealt with the intellectual synergies created between the Club of Rome (COR) and Prime Minister Pierre Trudeau's government. Both organizations had a deep interest in holistic rational policy development and were drawn to the possibilities being presented by the emergent fields of cybernetics and systems analysis. COR was drawn to systems analysis because it offered a scientific methodology by which to examine the interrelated problems facing humanity in the Problematique. Systems modelling also gained attention within the early phase of Trudeau's government as it dovetailed with Trudeau's and his advisors' attempts to introduce a greater degree of rationality and holistic thinking into the policy formation process. The interest in a new approach was evident at the Cabinet level, the supporting central institutions - Privy Council Office, Treasury Board and Prime Minister's Office - as well as in the formation of new institutions such as the International Development Research Centre (IDRC) and the Institute for Research on Public Policy (IRPP).¹

This and the next chapter shift attention away from the Prime Minister and examine more closely the efforts of COR/ Canadian Association for the Club of Rome (CACOR) member and Senator Maurice Lamontagne. Although the modernizing and systems-analysis approach to policy development discussed earlier continued on in the background, Lamontagne and others were actively promoting the associated ideas of systems analysis and futures studies to a wider bureaucratic and lay audience.

¹ G. Bruce Doern, and Thomas Conway, *The Greening of Canada: Federal Institutions and Decisions*, (Toronto: University of Toronto Press, 1994), p.18.

CACOR Established and Idea Practitioners

As mentioned in the introduction, Trudeau and other influential individuals had been in contact with the COR since shortly after its inception in 1968, but there was no national COR association into the 1970s.² In 1974 six Canadian members of the Club of Rome: Rennie Whitehead, Ronald Ritchie, William Stadelman, Senator Lamontagne, Pierre Gendron, and Robert Uffen, decided to formalise a COR presence in the country. With a letter of support from the Prime Minister, a meeting was called in May for interested individuals to meet in Toronto to discuss the possibility of forming the Canadian Association for the Club of Rome (CACOR).³ By the end of two days of deliberations it was decided to go ahead with CACOR's formation. The six COR members were joined by other influential Canadians including former Governor General Roland Michener, and then head of the C.D. Howe Institute Robert Fowler. Fowler accepted the position as Vice-Chairman and took responsibility for officially incorporating the organization under the Canadian Corporations Act and registering CACOR as a charitable organization.⁴

CACOR's principle objectives were to "promote study and discussion" of the interrelated problems facing humanity and potentially imperilling its future through the lens of the Problematique. It also sought to examine the Canadian implications of the

² Alexander King, "In a Well-disposed Country," in Roseann Runte (editor), *The Foundation for International Training: Twenty-Five Years Dedicated to International Development*, (New York: Legas, 2001), p.15.

³ R. H. Clayton, "The Birth of the Association," *CACOR Newsletter*, (11 September 1974), pp.1-6.

⁴ Clayton, "The Birth," pp.1-3.

-- "Canadian Association for the Club of Rome: Proceedings of Organizational Meeting 2-3 May 1974," (National Archives of Canada (NAC): RG 102 Accession Number 1984-85/520 Vol.4, File 1038-C7-2 pt.2), pp.1-5.

Problematique and “to be a catalyst in seeking solutions and the identification of Canada’s possible roles to promote” potential solutions.⁵

A large part of the influential presence exerted by the COR and CACOR in Canada stemmed from the determination and activities of Senator Maurice Lamontagne who became a key idea practitioner for systems analysis within the Canadian context. He played a similar role as critical idea practitioners discussed in the book *What’s the Big Idea?* The Senator provided a crucial link between idea and practice to “bring about change in organizations.”⁶ Through his chairmanship of the Special Senate Committee on Science Policy- known as the Lamontagne Committee – he was able to encourage the adoption of systems ideas in the policy process through the Ministry of State for Science and Technology (MOSST).

Imbued with a strong sense of urgency and believing in the importance of the need for greater holistic prospective thinking in policy development, Lamontagne’s beliefs echoed the key concerns of the Club of Rome. He set in motion processes that raised the profile of systems analysis, global modelling and futures studies in Canada. Lamontagne said that the need for systems analysis and futures studies was urgent and essential. The Senator claimed “without a better and more widely shared view of alternative futures, it [would] be impossible... to generate the collective will necessary to build the New Society on the basis of freedom, justice, efficiency and realistic expectations.”⁷

⁵ L. McCann, “Letters patent, Canadian Association for the Club of Rome, 29 May 1974,” (Canadian Association for the Club of Rome Archives (CACORA): File 3002: CACOR Bylaws), pp.1-5.

⁶ Thomas H. Davenport, Laurence Prusak and H. James Wilson, *What’s the Big Idea?: Creating and Capitalizing on the Best Management Thinking*, (Boston: Harvard Business School Press, 2003), pp.21-22.

⁷ Maurice Lamontagne, “The State of Future Studies in Canada,” (NAC: MG 32 B-32 Volume 5, File “Discours,”) p.6.

This and the next chapter will look at the cascading impact of Lamontagne's efforts. The current chapter describes how MOSST sponsorship of visits by COR individuals led to an opportune meeting of minds in support of an initiative by Ranjit Kumar of Seneca College. The result of their combined efforts was the establishment of the Foundation for International Training (FIT) in Toronto. The next chapter will examine additional impacts of the Lamontagne Committee report by examining the Senator's efforts to further promote and institutionalize systems thinking and future studies within the Canadian public policy community.

Maurice Lamontagne, The Troubled Road to Being a Senator

Maurice Lamontagne enjoyed a distinguished career as an economist before his election to parliament in 1963 in the Quebec riding of Outremont-Saint-Jean. He received a Masters degree in Economics from Harvard in 1943, taught at the universities of Laval and Ottawa, in 1955 was an Economic Advisor to the Privy Council, and was appointed special economic advisor to future Prime Minister Lester B. Pearson in 1958.⁸ Pearson described Lamontagne, along with Allan MacEachen and Tom Kent, as being three of his closest advisors: "idea men, with ideas very much in harmony with my own."⁹ The value and trust that Pearson had in Lamontagne's opinions was evident in 1963 when the recently elected Prime Minister consulted Lamontagne and Allan MacEachen exclusively to get critical advice on the formation of his minority government's cabinet.¹⁰

⁸ - "Lamontagne, Hon. Maurice," *The Canadian Who's Who: Volume XIII 1973-1975*, (Toronto: Who's Who Canadian Publications, 1975), p.566.

⁹ Lester B. Pearson, *Mike: The Memoirs of the Right Honourable Lester B. Pearson, Volume III: 1957-1968*, (Toronto: The New American Library of Canada Limited, 1975), p.55.

¹⁰ Pearson, *Mike*, p.93.

Lamontagne was a driving force behind the creation of the Economic Council of Canada (ECC). He first proposed the idea at the 1960 Liberal Thinkers Conference in Kingston and in subsequent years became the person who introduced the bill to establish the organization in parliament.¹¹ The Liberal Party had publicly advocated the creation of an economic advisory council since 1962. The initial idea was to bring together various economic interests, including business, labour and agriculture, which would work together and as a forward-looking unit provide the government with economic advice on coordinating economic policies that took into account the national interest. By April 1963 the idea had evolved into creating a national economic council of planners to “make forecasts and prepare programs designed to make the Canadian economy grow and flourish.”¹²

The ECC was established in 1963 to study medium and long-term prospects for the Canadian economy.¹³ While the new organization began its work in earnest in 1963-1964, Lamontagne’s career as a Cabinet Minister suffered a fatal blow. In what was described by Prime Minister Pearson as “a sorry and a sad business,”¹⁴ Lamontagne was eventually forced to resign, along with a second cabinet minister René Tremblay, due to a controversy that erupted over furniture.¹⁵

¹¹ Peter Strursberg, *Lester Pearson and the Dream of Unity*, (Toronto: Doubleday Canada Limited, 1978), p.63.

Maurice Lamontagne, “The Conflict Between Frequent Elections and Distant Goals, 19-21 October 1975,” (CAOR Archives: File 201 “COR Alternatives to Growth First Biennial Conference 1975), p.5.

¹² Walter Gray, “The 75 Promises of the Liberal Party,” *Globe & Mail*, (25 April 1962).

Walter Gray, “Sixty Days of Decision,” *The Globe Magazine*, (27 April 1963), p.9.

¹³ Lamontagne, “The Conflict,” pp.6-7.

¹⁴ Pearson, *Mike*, p.231.

¹⁵ Lamontagne family friends, Mac and Adolph Sefkind whose Montreal furniture business, Futurama Galleries, went bankrupt in 1964, had provided the furnishings for his Ottawa apartment. Matters were exacerbated when the Sefkind brothers fled the country and left in their wake bankrupt companies and approximately \$2 million in debts. Lamontagne and Tremblay were listed as debtors to Futurama Galleries. The case against Rene Tremblay was based on guilt by association rather than of action. He had refused to pay for furniture from the Sefkind brothers until it arrived. Yet when the company went bankrupt he also

Lamontagne's arrangement to pay for the approximately \$6,800 worth of furniture was described by Conservative opposition critic Erik Nielsen as being "unusual, to say the very least: he had set up what could justly be called the pay-me-if-you-see-method."¹⁶ The cabinet minister did not establish a regular monthly payment plan until after the Sefkinds had fled the country and their main creditor, the Bank of Montreal, demanded that he settle the account. Lamontagne considered the affair to have been a strictly private matter with "no public side effect... at all."¹⁷ His colleague Tom Kent said the scandal was the result of a strong sense of financial and political naiveté on the part of the novice cabinet minister and his honesty in dealing with the press. Kent went on to state that there were "few men wiser in large matters than Maurice Lamontagne, but he was no tactician."¹⁸

The weight of the scandal on Lamontagne caused the Prime Minister to worry about both his health and his future. In an interview with journalist Bruce Hutchison the

became implemented in the scandal. Nielsen said that Tremblay "had really done nothing wrong" but his association with the Sefkinds was not differentiated from that of Lamontagne. The former cabinet minister felt that both he and Tremblay had been "crucified" mainly by the media, but he especially resented what had happened to Tremblay who had not been as much as indiscreet. The book *Canada Since 1945* summarised the scandal by stating "Lamontagne had been indiscreet in his dealings. Tremblay, however, was guiltless but justified his actions poorly."

Erik Nielsen, *The House is Not a Home, An Autobiography*, (Toronto: Macmillan of Canada, 1989), pp.149-150.

John English, *The Worldly Years: The Life of Lester B. Pearson Volume II, 1949 – 1972*, (Toronto: Alfred A. Knopf Canada, 1992), p.282, 350.

Strursberg, *Lester Pearson*, p.233.

Robert Bothwell, Ian Drummond and John English, *Canada Since 1945: Power, Politics, and Provincialism*, (Toronto: University of Toronto Press, 1982), p.293.

¹⁶ Nielsen, *The House*, p.149.

Strursberg, *Lester Pearson*, p.231.

¹⁷ Strursberg, *Lester Pearson*, p.233.

¹⁸ Lamontagne's insistence that the arrangement for him to furnish his apartment in Ottawa was a private matter caused him to feel that the media was unjustifiably attacking him and Tremblay. The Prime Minister also concurred that Lamontagne and Tremblay had been driven out of Cabinet by unjust attacks from the media. The normally diplomatic Pearson's annoyance with the press, the furniture scandal and its aftermath was evident in his *Memoirs* when he referred to "those Press jackals."

Tom Kent, *A Public Purpose: An Experience of Liberal Opposition and Canadian Government*, (Kingston: McGill-Queen's University Press, 1988), pp.330-331.

Strursberg, *Lester Pearson*, pp.233-234.

Pearson, *Mike*, p.173.

Prime Minister said that Lamontagne had ended up in hospital with a nervous breakdown and Pearson did not think that he would “ever be good for anything again.”¹⁹

Lamontagne was not initially asked to resign his cabinet position. The Prime Minister described Lamontagne as “a darn good Canadian” and said he would not “destroy a man because he made a mistake.”²⁰

In the subsequent election in November 1965 the Liberals received a minority government and some Liberal insiders complained to Pearson that the furniture scandal had been at least partially responsible. The next month, Pearson asked the two beleaguered cabinet ministers to resign. Lamontagne had asked his party and his long-time colleague and friend for support to defend himself against the newest attacks. The negative response from Pearson left him with a sense of bitterness that persisted after his resignation in December 1965.²¹ This was not, however, the end of Lamontagne’s political career.

¹⁹ Bruce Hutchison, “A Conversation with the Prime Minister, 11 February 1965,” (University of Calgary Library Special Collections/ Archives: Bruce Hutchison Papers), p.3.

²⁰ Had the scandal been an isolated incident for the Pearson government matters might have turned out differently. However, the furniture scandal became another black mark against a government that was developing a litany of scandals. Tom Kent believed that the affair struck a close chord with the public as most people bought furniture using established financing arrangements. He added, “Of all the scandals, it was the one that probably did most damage to the government.” Pearson’s obvious frustration with the seemingly constant assault on his government due to political scandals was evident in a conversation with journalist Bruce Hutchison in February 1965. The Prime Minister commented that in lieu of scandal-ridden politicians like Lamontagne he wanted “old politicians who [knew] how to protect themselves.”

Hutchison, “A Conversation,” p.1.

Strursberg, “Chapter 8: Toil and Trouble,” *Lester Pearson*, pp.210-240.

Pearson, *Mike*, “Chapter 6: Politics in Disrepute,” pp.159-199, pp.230-231.

Nielsen, *The House*, pp.136-144, pp.148-158.

Bothwell, Drummond and English, *Canada Since 1945*, pp.292-300.

English, *The Worldly Years*, pp.280-284, pp.349-350

Kent, *A Public Purpose*, p.330.

²¹ Political scientist Robert Campbell, who had associated with Lamotagne, commented that just weeks from his death in 1982, he continued to proclaim his innocence and tell how he had been mistreated by the media and his party over the affair. Cabinet colleague Judy LaMarsh also believed that Lamontagne and Tremblay had been “hounded out... the Prime Minister appeared to stand by him for nearly a year...Pearson had been trying to force his resignation during much of that period.”

Strursberg, *Lester Pearson*, pp.281-282.

The Economic Council of Canada and Medium -Range Studies

While Lamontagne was becoming embroiled in political controversies, the organization he helped to create, the Economic Council of Canada (ECC), was busy establishing itself and formulating research strategies. During its early operations the ECC stated five key goals it hoped to accomplish: full employment, a high economic growth rate, price stability, a positive balance of payments and, finally to ensure a fair distribution of rising incomes.²² If the goals were taken as benchmarks to measure the success of the organization, it was not successful. In the opinion of both critics and supporters, such as economists H. Scott Gordon and Lamontagne, the ECC failed to reach its benchmarks.²³

Theories about the organization's inability to achieve its lofty goals are numerous. As early as the ECC's second report, fundamental problems with how the organization was established were evident. Professor H. Scott Gordon commented that its status as an independent research institute, its roles, responsibilities, scope of inquiry and how it fit into the policy making process were all ill-defined in the 1963 enabling legislation. He went on to state "the Council was brought into being on the basis of little more than a rather vague feeling that since many other countries had created similar agencies and regarded them as valuable, it would unlikely prove a mistake to establish one in

Robert Campbell, Conversation with Author, April 2004.

Judy LaMarsh, *Judy LaMarsh: Memoirs of a Bird in a Gilded Cage*, (Toronto: McClelland and Stewart Limited, 1969), pp.151-153.

²² Lamontagne, "The Conflict," pp.6-7.

²³ H. Scott Gordon, *An Assessment of the Role of the Economic Council of Canada and an Appraisal of its Second Annual Report*, (Montreal: Canadian Trade Committee, c.1965), pp.1-2.

Gilles Paquet, "The Economic Council as Phoenix," in Trevor Lloyd and Jack McLeod (editors), *Agenda 1970: Proposals for a Creative Politics*, (Toronto: University of Toronto Press, 1968), p.146.

W. Clive Simmonds, "Canada's Social and Economic Goals for the 1970s and 1980s," (CACOR Archives, File 4013: CACOR Writings by Members W. H. C. Simmonds), p.3.

Canada.”²⁴ Economist Gilles Paquet concurred and claimed that the level of ambiguity and vagueness about the purpose and operation of the ECC was needlessly high and hindered its work.²⁵

In addition to ambiguities emerging from the establishment legislation, the ECC suffered further fundamental problems. National Research Council and Canadian Association for the Club of Rome member Clive Simmonds argued that the prospect of achieving full employment was unrealistic and that Pierre Trudeau was one of the first to recognise that the goal was not tenable. In 1972 Trudeau openly pondered the need to rethink commitment to the work ethic and to accept unemployment as a permanent part of national life. He further added that the hope of full employment was not attainable and it was time to develop new values that replaced the traditional notion of the right to work.²⁶

Twelve years into its operations, idea-originator Lamontagne conceded that the ECC’s impact had at best been marginal. In 1975 the country “was still without an integrated plan... policies [had] not become more broad-based, long-sighted and coordinated.”²⁷ Academic B. W. Wilkinson added that the ECC appeared to follow rather than lead government economic policy development. He explained that the difficulty came in part due to a timid reluctance to set priorities for society and also due to the relatively simplistic nature of their annual reports. Wilkinson stated that the ECC reports tended “not go beyond the first year university economics level in their profundity.”²⁸

²⁴ Gordon, *An Assessment*, pp.1-2.

²⁵ Paquet, “The Economic,” p.146.

²⁶ Simmonds, “Canada’s Social,” p.3.

-- “PM Ponders Future: Pay Folks to be Idle?” *Montreal Gazette*, (17 March 1972), p.17.

²⁷ Lamontagne, “The Conflict,” p.11.

²⁸ B. W. Wilkinson, *The Sixth Annual Review: A Commentary*, (Montreal: Private Planning Association of Canada, 1969), p.36.

Trudeau biographers Christina McCall and Stephen Clarkson subsequently described the ECC's reports as independent but orthodox and said that Trudeau tended to dismiss them, as they were often critical of his government.²⁹

The ECC's focus on the medium-term prospects, and lack of attention to both short and long-term studies, also came in for severe criticism. EEC staff person Fred Thompson, who had been with the organization since its inception, said there was a distinct reluctance to conduct long-range studies, in part, due to a general reluctance on the part of economists to look beyond five-year intervals.³⁰ O. E. Thür, the ECC's Vice President in 1974, admitted that in its first decade of operation, especially in the annual reports of 1964, 1967 and 1969, attention had been restricted to medium-term projections of five years into the future.³¹

Senator Lamontagne's disappointment, with the ECC was evident in a 1975 paper he presented at the "Conference on Limits to Growth '75" in Texas. His paper, "The Conflict Between Frequent Elections and Distant Goals," was presented as a cautionary tale to an American audience who were considering establishing a similar institute within

²⁹ Christina McCall and Stephen Clarkson, *Trudeau and Our Times Volume 2: The Heroic Delusion*, (Toronto: McClelland & Stewart Inc., 1994), p.126.

³⁰ Thompson went on to explain that in 1967, he was unequivocally told by ECC Chairman Arthur Smith that the time frame for studies was to be five years and that one of the senior staff economists added that the organization did not want futurologists.

Fred G. Thompson, *Looking Back on the Future*, (Ottawa: Futurescan International Inc., 1992), p.11, pp.64-65.

³¹ Academics Norman Mogil and B. W. Wilkinson commented that the ECC's mandate separating short-term policies from medium-term goals was inherently flawed. Mogil said that the separating of the two was "at best difficult and often impossible... commenting on a three-to-five year performance must include an implicit comment on the one-to-two year performance."

O. E. Thür, "The Economic Council of Canada as a Catalyst," in Robert A. Mundell and B. Elayne van Snellenberg (editors), *Policy Formation in an Open Economy: Volume 1*, (Waterloo: University of Waterloo, 1974), p.62.

Norman Mogil, *The Economic Council's Ninth Annual Review: Forecasting with CANDIE*, (Montreal: C. D. Howe Research Institute, 1973), p.21, 44.

Wilkinson, *The Sixth Annual*, p.35.

the President's Office.³² The Senator sought to explain why Canada's first major attempt at planning failed "in the hope that [Canada's] own mistakes [would] not be repeated elsewhere, especially in the United States."³³ He argued that the ECC's focus was too narrow and failed to account for all the factors that can influence economic growth.³⁴ The Senator's harshest criticisms concerned the ECC's lack of ability to influence the direction of federal economic policy. According to Lamontagne, the key reasons the ECC's impact had been marginal were because the ECC's plans for incorporating long-term perspectives remained in the preliminary stages and, secondarily, it had failed to "produce a comprehensive and detailed plan," about how to achieve its goals.³⁵

While ultimately disappointed with the ECC, Lamontagne retained a strong belief in the need to incorporate long-range thinking into policy development. Fortunately for the Senator, he got a second chance to promote and institutionalize long-range research and policy development in Canada. While his elected political career may have been shortened by the furniture scandal, his public service career was extended due to the generosity of Prime Minister Pearson. It is to Lamontagne's second political career that the chapter now turns its attention.

³² Lamontagne, "The Conflict," pp.1-2.

³³ The criticisms of the ECC discussed by Lamontagne often reflected the criticisms noted above. This was evident in his discussion of the ECC's lack of attention to short and long-term considerations, unrealistic expectations and a lack of impact on government policy development. Senator Lamontagne commented that the early assumptions of the ECC's reports were predicated upon an unrealistic expectation that the international economic environment would remain favourable. The ECC's O. E. Thür conceded the fact in 1974 when he said the organization's methodology used known data and projected findings to a specific terminal end date and "the path between the two points of time was assumed to be perfectly regular."

Lamontagne, "The Conflict," pp.3-4, p.12.

Thür, "The Economic Council," p.62.

³⁴ Lamontagne, "The Conflict," p.7, pp.12-16.

³⁵ Lamontagne, "The Conflict," pp.16-18.

The Lamontagne Commission and Canadian Science Policy

In April 1967 Maurice Lamontagne was called to the Senate where he served with distinction and great energy.³⁶ As an appointed Senator, away from the pressures of electoral politics, Lamontagne was able to devote a substantial amount of time and energy to his passion for popularizing futures studies and finding means of incorporating long-range planning into the public policy making process. Contemporary Tom Kent believed that the former Cabinet Minister was “one of the few brilliant exceptions” to the idea that Senators contribute little to the political process and that the Senatorial setting “served like a tenured professorship to a man with an active mind.”³⁷

While both Pearson and subsequently Trudeau attempted to improve science policy, it was evident in the late 1960s that serious problems that needed to be addressed remained.³⁸ Treasury Board Secretary Simon Reisman alleged that Canadian science

³⁶ On the same day Pearson also appointed Mary Elizabeth Kinnear, John Keith Laird and Andrew Ernest Joseph Thompson to the Senate.

Canada's Who's Who, “Lamontagne,” p.566.

Senate of Canada, “Senators 1867 to Date by Prime Minister - PEARSON, Lester Bowles,” *Senators and Members – Historical Information*, <http://www.parl.gc.ca/information/about/people/Senate/SenIdx.asp?lang=E&Hist=Y¶m=pm&id=151>, (accessed 30 August 2005).

³⁷ Kent, *A Public Purpose*, p.331.

³⁸ Attempts to reform and coordinate the development of Canadian science policy had begun during the early years of the Pearson government. With the 1962 Glassco Commission Report as a catalyst, in 1963-1964 the Privy Council Office (PCO) established a specific Science Secretariat to help with policy coordination. It was also mandated to provide science information to the Prime Minister, PCO, Cabinet, and subsidiary committees, as well as to other agencies including the Treasury Board. As well the secretariat was involved in discussions on science topics within departments and conducted special studies if requested. Finally it advised External Affairs about science issues related to international relations. While it occupied an important position, it remained strictly a neutral advisory body that had neither granting powers nor the ability to develop national science policies.

Two years later, in 1966, the Science Council of Canada was created as a Crown corporation to provide regular overviews (through reports) of Canada's science research resources and activities. Established as an analogous institution to the Economic Council of Canada, the Science Council was to make policy recommendations to government concerning research and development programs within the context of contributing to solving the country's various economic and social problems. The Science Council was expected to assume responsibility for long-term research and development planning and for assessing the role of government science policy in relation to the academic and private sectors. In addition, it was responsible for the collection of science research and the development of statistical information. Finally, it

policy was ‘the by-product of separate cabinet decisions on individual government programs.’³⁹ As a result of a perceived need for reform, in November of 1967 Lamontagne was asked to chair a special Senate Committee to examine the relative position of Canadian science activities and policies in comparison to other industrialized nations and to determine “the requirements of the new scientific age.”⁴⁰ Environmental

was responsible for devising the best methods of cooperation and the sharing scientific information between the public and private sectors.

An Organization for Economic Cooperation and Development (OECD) review of science in Canada commented that prior to the Science Council being made into a corporation similar to the Economic Council of Canada in 1969, a great deal of confusion between the Science Council and Science Secretariat existed. The OECD said there was a strong need for clarification of roles and responsibilities. The Science Council’s status as a corporation helped to lessen confusion as it came to advise the government on issues of long-term science development and programs while the Secretariat concerned itself with the ongoing issues of administration, decision-making and implementation of science policies. Nonetheless, neither organization had the complete ability to undertake the development of comprehensive national science policy strategies. A key problem was the fact that their respective roles were consultative; they were not mandatory members of the decision making process. They were consulted only by invitation from either representatives of the Cabinet or the Treasury Board.

Meanwhile Pearson’s successor Trudeau also made an initial attempt to improve science policy. While admitting “some apparent disadvantages,” Trudeau asked the President of the Treasury Board, C. M. Drury, to also assume responsibility for science policy. However, Treasury Board lacked the authority, expertise and staff to develop and implement national science policies.

Alexander King*, Saburo Okita* and Pierre Piganiol, *Organisation for Economic Co-operation and Development: Reviews of National Science Policy: Canada*, (Paris: OECD Publications, 1969), pp.65-71, pp.76-77. (Hereafter OECD, *Reviews of National Science*). *Both King and Okita were members of the Club of Rome.

Frances O’Malley, and Vaughn Chandler (editors), *Canada Year Book, 1975: An Annual Review of Economic, Social and Political Developments in Canada*, (Ottawa: Minister of Industry Trade and Commerce, 1975), p.344.

C. M. Drury, “Commons Debates 21 June 1971,” *House of Commons Debates, Official Report – Third Session Twenty-Eighth Parliament, Volume VII, 1971*, (Ottawa: Queen’s Printer, 1971), p.7166. (Hereafter *Commons Hansard*)

Jean Sauvé, “Commons Debates 1 March 1974,” *House of Commons Debates, Second Session Twenty-Ninth Parliament, Volume I, 1974*, (Ottawa: Queen’s Printer, 1974), pp.96-97.

Pierre E. Trudeau, “Commons Debates, 18 December 1970,” *Commons Hansard Third Session- Twenty Eighth Parliament, Volume II, 1970*, (Ottawa: Queen’s Printer, 1970), p.2194.

Maurice Lamontagne (Chairman), *A Science Policy for Canada: Report of the Senate Special Committee on Science Policy, Volume I: A Critical Review: Past and Present*, (Ottawa: Queen’s Printer for Canada, 1970), pp.183-188. (Hereafter *Lamontagne Report, Vol. I*).

³⁹ Simon Reisman, (Quoted by David Orlikow), “Commons Debates 21 June 1971,” *Commons Hansard Third Session Twenty-Eighth Parliament, Volume VII, 1971*, (Ottawa: Queen’s Printer, 1971), p.7170.

⁴⁰ *Lamontagne Report, Vol. I*, p.1.

OECD, *Reviews of National Science*, pp.76-77.

Frances O’Malley, and Vaughn Chandler (editors), *Canada Year Book, 1975: An Annual Review of Economic, Social and Political Developments in Canada*, (Ottawa: Minister of Industry Trade and Commerce, 1975), p.344.

scientist Ronald Hayes argued that most of the twenty-six Senators who served on the Committee, with the exceptions of Lamontagne and Conservative Senator Allister Grosart, “were, in truth, sleepers.” He went on to state: “[the] chairman, Senator Lamontagne, was in complete dominance.”⁴¹

Initial activities for the Lamontagne Commission consisted of laying the foundations for subsequent work through national and international correspondence with science experts about Canada’s science activities in a comparative context.⁴² Reflecting an approach consistent with holistic systems thinking, the Commission adopted an open-ended strategy for recruiting groups to appear before the committee and for accepting submissions to help with their report. The decision to take a liberal view of the term “science” provided the opportunity for the various Canadian research groups from government, federal agencies, academic institutions, industry and various professional organizations to take part. Hayes claimed that many “surprised professors from the humanities” were invited to appear before the Committee. He added that it appeared that

C. M. Drury, “Commons Debates 21 June 1971,” *House of Commons Debates: Official Report – Third Session Twenty-Eighth Parliament, Volume VII, 1971*, (Ottawa: Queen’s Printer, 1971), p.7166. (Hereafter *Commons Hansard*)

Jean Sauvé, “Commons Debates 1 March 1974,” *Commons Hansard Second Session Twenty-Ninth Parliament, Volume I, 1974*, (Ottawa: Queen’s Printer, 1974), pp.96-97.

⁴¹ Senator Grosart’s later questioning of Science Council Chairman O. M. Solandt on potential projects for the IDRC further illustrated the extent to which Lamontagne dominated committee proceedings and his devotion to systems analysis. In asking Solandt to describe potential IDRC projects Grosart claimed he was going to ask Solandt “to draw a ‘picture’ but, as a graduate of Senator Lamontagne’s committee, perhaps I should say ‘a structural model’”.

F. Ronald Hayes, *The Chaining of Prometheus: Evolution of a Power Structure for Canadian Science*, (Toronto: University of Toronto Press, 1973), pp.52-53.

Senator Allister Grosart, “Proceedings of the Standing Senate Committee on Foreign Affairs, 17 March 1970), *Debates of the Senate Official Report (Hansard), Second Session-Twenty-Eighth Parliament 1969-70*, (Ottawa: Queen’s Printers, 1970), p.1015. (hereafter *Senate Hansard*)

⁴² The Senate also stimulated a broader public forum for discussing Canadian science policy. However, when Parliament was prorogued for the 1968 election all Senate activities came to an end. The subsequent year it was decided in the new Senate session to continue the committee’s work.

Drury, “Commons Debates 21 June 1971,” p.7166.

Maurice Lamontagne, “Senate Debates, 13 and 17 September 1968,” *Senate Hansard, First Session Twenty-Eighth Parliament, Volume I*, (Ottawa: Queen’s Printer, 1969), p.16, pp.32-34..

Senator Lamontagne saw science being involved in all areas of government with two exceptions: the judiciary and French-English relations. Science became equated simply with knowledge in any academic form.⁴³

It was a definition that echoed Aurelio Peccei's opinion of science as "profound knowledge, orderly thought, systematic research and impartial attitude."⁴⁴ The results of using a broad definition for what constituted "science" produced approximately 12,000 pages of submissions and a report that provided a wide-ranging snapshot of research activities in the country and opinions on what was needed for the future.⁴⁵

At a cumulative cost of \$435,000 the results of the Senate's initial inquiries and research were released in 1970 and contained strong criticisms of the state of Canadian science policy development. Manitoba MP David Orlikow described the science report as "the most systematic and detailed study ever undertaken in this country." He went on to state that it had "made the most scathing comments."⁴⁶ The report lamented the lack of effective science policy coordination at the federal government level. The Lamontagne Committee Report argued that a substantial policy vacuum that prevented the development of coordinated and effective science policies existed at the central federal

⁴³ Hayes, *The Chaining*, pp.53-54.

Lamontagne Report, Vol. 1, p.2 and Annex C and Annex D, pp.298-327.

⁴⁴ Aurelio Peccei, *The Chasm Ahead*, (Toronto: The Macmillan Company, 1969), p.258.

⁴⁵ The Lamontagne Committee received submissions from and conducted interviews with non-traditional science groups such as: the Department of Veterans Affairs, Humanities Research Council of Canada, Canadian Historical Association, Classical Association of Canada, John Labatt Limited, The Canadian Easter Island Expedition Society, the Canadian Advertising Research Foundation and the Canadian Peace Congress.

Maurice Lamontagne, "Senate Debates, 26 October 1970," *Senate Hansards, Third Session- Twenty Eighth Parliament, Volume I*, (Ottawa: Queen's Printers, 1971), p.66.

Lamontagne Report, Vol. 1, pp.2-4, pp.298-304.

⁴⁶ Lamontagne, "Senate Debates, 26 October 1970," p.66.
Orlikow, "Commons Debates 21 June 1971," p.7169.

level. It further noted that the Science Secretariat and the Science Council of Canada both lacked the ability to develop and implement coordinated science policies.⁴⁷

The Lamontagne Committee Report often emphasised points that had previously been made in the 1969 Organisation for Economic Co-operation and Development (OECD) report into the status of science policy development in Canada. The OECD study bluntly stated that Canada's "science policy machinery [was] not complete.... The scope of the revised institutions would have to go beyond mere reorganization of government functions in regard to science policy; they would also have to include application of the decisions."⁴⁸ The first Lamontagne Committee Report concluded with the stern admonition that Canada "must develop a coherent overall science policy... not only [to] meet... economic objectives more easily but also [to] more realistically face... mounting social problems."⁴⁹ The conclusion echoed the OECD report that said Canada "must set up institutions and agencies to guide science policy with an eye to its effects and future results, as well as in the light of past experience."⁵⁰ Both international and national observers examining science policy development in Canada had arrived at similar conclusions. The OECD followed by the Lamontagne Committee established the need for the federal government to improve how public science policy was developed.

When taken together both the OECD and the Lamontagne Commission reports had a substantial impact on the subsequent development of Canadian science policy.⁵¹

The Conservative opposition in the Commons used the reports to confront the

⁴⁷ *Lamontagne Report, Vol. 1*, pp.183-188.

⁴⁸ The OECD Report emphasised that their comments were not criticisms of the individuals working in the established institutions, but rather reflected structural problems that had to be addressed. It was the system that needed to be changed NDP .

OECD, *Reviews of National Science*, p.80, p.409.

⁴⁹ *Lamontagne Report, Vol. 1*, p. 284.

⁵⁰ OECD, *Reviews of National Science*, p.386.

⁵¹ Drury, "Commons Debates 21 June 1971," p.7166.

government over an apparent lack of policy coordination.⁵² Opposition leader Robert Stanfield asked what was planned to address the criticisms of the government's science policy development "by the committee of the Senate on science, following upon criticism by the OECD some time ago."⁵³

MOSST – The Federal Response to the Senate and OECD Criticisms

The federal response to the 1969 OECD report and the subsequent 1970 publication of The Lamontagne Report was swift. Within a year, in 1971, MOSST was established to fill the science policy formation void and to provide coherent science policy leadership.⁵⁴ The creation of a Ministry, as opposed to a dedicated department,

⁵² Robert Stanfield, "Commons Debates, 18 December 1970," *Commons Hansard Third Session- Twenty Eighth Parliament, Volume II, 1970*, (Ottawa: Queen's Printer, 1970), p.2194.

George Hees, "Commons Debates, 18 December 1970," *Commons Hansard Third Session- Twenty Eighth Parliament, Volume II, 1970*, (Ottawa: Queen's Printer, 1970), pp.2194-2195.

⁵³ Stanfield, "Commons Debates, 18 December 1970," p.2194.

⁵⁴ The creation of ministries of state within the Canadian federal political systems was a Trudeau era innovation that built upon British precedents. Ontario MP Keith Hymmen explained to the Commons that the idea of a Ministry of State was adopted from Canada's mother Parliament Westminster in London. A Ministry of State differed from traditional government departments by being efficient in terms of operations. Ministries of State are responsible for specific policy areas and are expected to both help develop public policies and to act as aids to traditional federal departments. By concentrating on one policy area a Ministry of State tends to have power and influence without the often-cumbersome administrative structures and levels of responsibility associated with line federal departments. Hymmen said it would provide a valuable aid to government and the policy making process without the creation of a large cumbersome department.

Pierre E. Trudeau, "Letter to Alastair Gillespie, 12 August 1971," (NAC:R1526, Volume 25, File MOSST Order in Council), p.1.

Maurice Lamontagne (Chairman), *A Science Policy for Canada: Report of the Senate Special Committee on Science Policy, Volume 4: Progress and Unfinished Business*, (Ottawa: Minister of Supply and Services, 1977), p.2, (Hereafter *Lamontagne Report, Vol. 4*).

Drury, "Commons Debates 21 June 1971," p.7166.

Robert J. Jackson and Michael M. Atkinson, *The Canadian Legislative System: Politicians and Policymaking: Second, Revised Edition*, (Toronto: Gage Publishing Limited, 1980), p.57.

Keith Hymmen, "Commons Debates 1 April 1971," *Commons Hansard Third Session, Twenty-Eighth Parliament, Volume V, 1971*, (Ottawa: Queen's Printer, 1971), pp.4835-4836.

would ensure that project control remained in the traditional departments supporting science research and development initiatives.⁵⁵

MOSST supporter Keith Hymmen explained that with the help of a secretary and, a small number of operational assistants, MOSST's Minister would be able to work with existing agencies and actors, such as the Science Council of Canada, in helping to design science policy without excessive numbers of bureaucrats being involved.⁵⁶ Cabinet member Charles M. Drury echoed Hymmen's sentiments and explained in the House of Commons that activity related to science and technology was pervasive throughout federal departments. MOSST's role was "not intended to fragment the responsibilities of other ministers...[it was] principally one of advising the government on virtually all matters relating to science and technology... [and] to foster co-operative relationships" nationally and internationally.⁵⁷

MOSST was "made responsible for the overall formulation of policy and the co-ordination of government programs and activities in the area of science and technology."⁵⁸ MPs John Maclean and Drury added that MOSST's most important roles were in helping to create coherent science policy, and in "advising, monitoring, forecasting and co-ordinating" science policy in coordination of federal spending priorities. It was further expected that MOSST would develop and use forecasting

⁵⁵ Both *The Lamontagne Report* and the 1969 OECD report that rejected outright the creation of a Ministry/Department of Science. The OECD feared that the creation of a full-fledged department would cause bureaucratic obstacles and would "inevitably tend to be operational rather than policy oriented." In addition establishing a specific Department of Science would have run counter to international trends. It would have also taken control out of the front-line departments closest involved in the science research and who were in closest contact with those who would be most affected by the results. The OECD fervently believed that "the closest relationship must be sought between the creators and users of new knowledge."

OECD, *Reviews of National Science*, p.409.

⁵⁶ Hymmen, *House of Commons Debates*, 1 April 1971, p.4836.

⁵⁷ Drury, *House of Commons Debates*, 21 June 1971, p.7166.

⁵⁸ *Lamontagne Report*, Vol. 4 p.16.

Ghent, *Canadian Government*, p.18.

methods for the short and long term consequences of the implementation of emergent technologies.⁵⁹ The new ministry was to behave in a similar fashion as the central institutions, the Privy Council Office, the Prime Minister's Office and the Treasury Board; it was to be a horizontal agency. All federal departments involved in science activity were to maintain contact and provide information to MOSST who would in turn coordinate, where possible, activities and provide an overall sense of direction.⁶⁰

MOSST's role called for a holistic systems approach to the development of national science public policy. Lamontagne had used the Senate Committee's reports as a platform to push for the greater use of systems analysis and future studies activities in Canada, especially in the realm of policy development. MOSST was the key result of the Lamontagne Committee recommendations and consequently it became heavily involved in systems analysis studies and futures activities.

MOSST and Lamontagne: the Formative Years

The Lamontagne Committee report resulted in MOSST's creation and influenced its development and intellectual thinking during the initial years of operation. As the first

⁵⁹ Furthermore Cabinet Minister Jeanne Sauvé commented that other countries had established coordinating bodies for science policies and that the Lamontagne Committee report helped the Canadian government to establish its own coordinating body, MOSST.

J. A. MacLean, "Commons Debates 21 June 1971," pp.7167- 7169.

Drury, "Commons Debates 21 June 1971," pp.7166-7167.

Jean Sauvé, "Commons Debates 1 March 1974," *Commons Hansard Second Session Twenty-Ninth Parliament, Volume 1, 1974*, (Ottawa: Queen's Printer, 1974), pp.96-97.

⁶⁰ In a letter to the first Minister of State for Science and Technology, Alastair Gillespie, Prime Minister Trudeau stated, that in addition to the regular heavy demands of being a minister, Gillespie's office carried extra difficulties in having to be innovative and in having a "great breadth of responsibility." Trudeau further added that ultimately the future success of the ministries of state within the Cabinet system would "depend on you and such other ministers of state," with "a special responsibility in nurturing the system of ministers and ministries of state to maturity."

Orlikow, "Commons Debates 21 June 1971," pp.7172- 7173.

Pierre E. Trudeau, "Letter to Alastair Gillespie, 12 August 1971," (NAC:R1526, Volume 25, File MOSST Order in Council), p.1.

Minister of State for Science and Technology Alastair Gillespie was heavily dependent upon close advisors with previous experience dealing with questions of science policy.⁶¹ In seeking advice, Gillespie was put into close contact with individuals who were either existing Club of Rome members or would subsequently become members of the Canadian Association for the Club of Rome. Rennie Whitehead, C. R. Nixon, Pierre Gendron and Omond Solandt were on the list of those helped the new minister mould MOSST. Gillespie commented that by the time he was given the portfolio, the terms of reference had previously been developed by a small group of bureaucrats within the Privy Council's Science Secretariat including Whitehead and Nixon.⁶²

The close relationship was further evidenced in correspondence between Gillespie and Whitehead at MOSST's foundational stages. On 17 August 1971 advisor Rennie Whitehead wrote to Gillespie to discuss the Club of Rome (COR), the impact of the April 1971 COR meeting in Montebello Quebec, and the activities of systems analysis groups at Queen's University in Ontario and in Vancouver, British Columbia. In that letter, Whitehead said that since the COR meeting in Montebello there had been "an awakening of interests" on the international, national and regional levels over the potential application of systems analysis. He said that pressure was being directed at the new ministry from two main sources. The first was Dr. Robert J. Uffen who wanted to start a major systems analysis project at Queen's University where he had recently become the

⁶¹ Prime Minister's Office, "Press Release, 27 August 1971," (NAC: R1526 Volume 25 File MOSST Order in Council), p.3.

⁶² Whitehead considered establishing MOSST to be a mistake as it took science policy out of the Privy Council Office and as a consequence left science policy more vulnerable to political and bureaucratic wrangling and considerations extraneous to effective science policies. However, he decided to work within MOSST to help with policy development and established a close relationship with Gillespie. Whitehead also created a critical link to the Club of Rome and the Canadian Association for the Club of Rome which will be discussed in this chapter.

Alastair Gillespie, "Conversation with author, June 2004". (Hereafter Gillespie Interview)

J. Rennie Whitehead, "Conversation with author, June 2005". (Hereafter Whitehead Interview)

Dean of the Faculty of Applied Science. He had served the previous two years as the Chief Science Advisor in the Privy Council Office Science Secretariat and was intent on asking for federal funds to support his efforts.⁶³

The second set of pressures came from both the Privy Council Office and the Prime Minister's Office. These offices were keenly interested in supporting futures projects. Whitehead further suggested that MOSST might want to support outside groups conducting futures research, but only after MOSST's organization had been clearly sorted out and after the futures groups had become involved in their projects.⁶⁴

Further discussions were held between the two men concerning what MOSST's ultimate shape ought to have been. Following one of their discussions, Gillespie decided to write an official memorandum to Whitehead concerning the objectives and "general thrust" for MOSST on 24 August 1971. Gillespie said that it was not his general practice to send out a memorandum based upon a discussion but he made an exception as he felt "that the direction that [they took] at the beginning, and the clear understanding [they had] of [their] tasks, [was] of fundamental importance." He further added that his views were "very similar to [Whitehead's] own and of other key persons in the [PCO] Secretariat."⁶⁵

The importance of Club of Rome members to the shaping of the nascent MOSST department was evident to Adolph Schmidt, the American Ambassador to Canada at the time. In a November 1971 letter signed by Ambassador Schmidt and sent to the US

⁶³ J. Rennie Whitehead, "Memorandum for The Honourable Alastair Gillespie RE: Club of Rome Systems Analysis Groups, 17 August 1971," (NAC:R1526, Volume 26, File Club of Rome), pp.1-2.

-- "Uffen, Robert James," *The Canadian Who's Who Vol. XIII, 1973-1975*, (Toronto: Who's Who Canadian Publishers, 1975), p.1006.

⁶⁴ Whitehead, "Memorandum," pp.1-2.

⁶⁵ Alastair Gillespie, "Memorandum to J. Rennie Whitehead Re: The task of the New Ministry of State for Science and Technology, 24 August 1971," (NAC:R1526, Volume 25, File Science Policy), p.1, p.3.

Secretary of State, William P. Rogers, it was noted that of the initial MOSST staff, the largest and most influential group shaping the organization was from the Privy Council Office's Advisory Committee on Science and Technology. He further added that the head of the group, Dr. Rennie Whitehead, described as a rapidly emerging powerful figure within the nascent department, and other key bureaucrats tended to be heavily involved in international science activities through groups such as the Organization for Economic Cooperation and Development (OECD) and the Club of Rome.⁶⁶

Schmidt postulated that as a consequence of the influence of the key internationalist scientists within MOSST, the nascent organization tended to place a high priority on the concerns of the international groups with which they were associated. He observed that MOSST's outlook tended to mirror the "theoretical considerations of population, environment, and economic interaction of technology" of systems analysis guru Jay Forrester. Schmidt continued that the interests of the key scientific advisors would probably shape MOSST's development while the Minister continued to deal with pragmatic political considerations of science policy.⁶⁷

It was also evident that to Schmidt that Gillespie matched the Club of Rome members' interests in futures studies, systems analysis and their strong belief in its importance to policy development.⁶⁸ The Minister often wrote memos to himself concerning futures books and seminars. For example he wrote a five-page assessment of *The Limits to Growth*, a book he considered on first reading to have been "one of the

⁶⁶ Adolph W. Schmidt, "US Embassy, Ottawa, to Secretary of State November 1971," (Richard M. Nixon Archives: RG 59 Numerical Files, 1970-3, Pol7. Can, Box 2156), p.17.

⁶⁷ Schmidt, "US Embassy," p.17.

⁶⁸ Schmidt, "US Embassy," pp.15-17.

most important books ever written.”⁶⁹ In addition Gillespie wrote a three-page summary of Alvin Toffler’s *Future Shock* and attended futures seminars hosted by individuals such as Toffler and futures organizations such as the Hudson Institute.⁷⁰

Part of Gillespie’s interest in futures studies was that forecasting was an integral part of MOSST’s first responsibility – advising the government. In a letter to Gillespie in August 1971, Trudeau said that MOSST’s “primary task [was] to advise the Government on the priorities that it should set... in the development and application of science and technology in the national interest.”⁷¹ The Prime Minister further added that the “main attention and that of [his] Ministry [were] to be directed” to was defining Canada’s national interest and objectives for science and technology.⁷²

When Charles Drury first announced plans for MOSST in the House of Commons in June 1971, the advisory role was identified as MOSST’s top priority and forecasting was identified as an integral part of that role. Drury further stipulated that the new institution would use “forecasting methods to try and foresee, wherever possible, both the

⁶⁹ Gillespie Interview.

Alastair Gillespie, “Memorandum to Self Re: “Limits to Growth,” August 8, 1972,” (NAC: R1526 Volume 26, File: Memorandum to Self), pp.1-5.

⁷⁰ For the seminars he attended Gillespie wrote his impressions and remained keenly interested in the arguments presented. For example after attending the Toffler seminar in Toronto he attempted to get a copy of the address to further explore the ideas presented. Similarly, he wrote five pages of notes based on a Hudson Institute seminar he had attended. The extent of popular interest in futures studies in the 1970s was further evidenced by sales of *Future Shock*. Reflecting upon book sales Toffler commented that he and his wife ‘thought the book would sell 30,000 copies at best.’ Actual sales in just the US topped five-million copies.

Alastair Gillespie, “Memorandum to Self Re: “Limits to Growth,” August 8, 1972,” (NAC: R1526 Vol.26, File: Memorandum to Self), pp.1-5.

Alastair Gillespie, ““*Future Shock*” by Alvin Toffler, no date,” (NAC: R1526 Volume 26, File: Memorandum to Self), pp.1-3.

Alastair Gillespie, “Memorandum to file October 25th 1976,” (NAC: R1526 Volume 255, File: 240-0 Energy Policy V1 20F2), p.1.

Alastair Gillespie, “Memorandum to Self Re: Notes on Hudson Institute Seminar August 22, 1972, August 23, 1972,” (NAC: R1526 Volume 46, File: Associations), pp.1-5.

Mimi Kirk, “Where Are They Now? Alvin Toffler Author of *Future Shock*,” *Smithsonian*, (Volume 36 Number 4, July 2005), p.14.

⁷¹ Trudeau, “Letter to Gillespie, 12 August 1971,” p.2.

⁷² Trudeau, “Letter to Gillespie, 12 August 1971,” p.2.

short-term and the long-term consequences of utilizing various technologies.”⁷³ Former MOSST and Department of the Environment Minister John Roberts put the creation of MOSST in the context of broader environmental concerns, especially related to the positive and negative impacts of technological innovations on society and the environment. Roberts believed that MOSST was established, in part, due to the Prime Minister’s “concerns for the management of technology.”⁷⁴

In MOSST’s early months of operations, Gillespie became frustrated with an apparent difficulty for MOSST to “come to terms with its objectives.”⁷⁵ He insisted that in terms of the development of priorities for research and development “an appropriate balance between short-term consideration and longer range needs,” had to be developed and maintained.⁷⁶

In August 1971, Gillespie was given the added responsibility for both the Science Council of Canada and the Science Secretariat from the Privy Council Office (PCO). MOSST was designated as the department responsible for the units. The move formally shifted Whitehead, who had been Science Advisor to the PCO’s Science Secretariat, into MOSST. The change in the Science Council’s responsibilities meant that future CACOR member Omond Solandt became a key MOSST advisor as well.⁷⁷ Continuing interest in the Club of Rome within MOSST and the federal Cabinet was further evidenced in a

⁷³ Alastair Gillespie, “Memorandum to Self Re: Science and Technology, 25 June 1975,” (NAC: R1526 Volume 25 File Ministry of State F16), p.1.

⁷⁴ John Roberts, “Managing the Environmental Challenge,” in Thomas S. Axworthy and Pierre Elliott Trudeau (editors), *Towards A Just Society: The Trudeau Years*, (Toronto: Penguin Books, 1992), p.197.

⁷⁵ Alastair Gillespie, “Self Memo Re: Discussion with Dr. Aurele Beaulnes, November 3rd re Departmental matters, 3 November 1971,” (NAC: R1526 Volume 25 File Science Policy), p.1.

⁷⁶ Alastair Gillespie, “Self Memorandum Re: Priorities for Research and Development, no date,” (NAC: R1526 Volume 25 File Science Policy), p.2.

⁷⁷ Prime Minister’s Office, “Press Release, 27 August 1971,” p.1.

Pierre Trudeau, “Letter to O. M. Solandt, 12 August 1971,” (NAC: R1526 Volume 25 File MOSST Order in Council), p.2.

December 1971 memorandum on MOSST's priorities. In the note to civil servant Aurèle Beaulnes concerning a discussion they had had on 30 December 1971, Gillespie informed him that MOSST's "submission on the Club of Rome" was a top priority for Cabinet and it had to be coordinated with External Affairs.⁷⁸

A symbiotic relationship emerged between MOSST and COR/CACOR that was in part the consequence of the professional and personal relationships and similarities of interests that emerged between MOSST's first Minister, Alastair Gillespie and Club of Rome advocates such as Rennie Whitehead. COR members were able to ensure access to fellow COR members - renowned international scientists such as Alexander King, Hugo Thiemann and Denis Gabor. MOSST was able to easily network in the international scientific community that was associated, directly and indirectly, with the Club of Rome. Included in the list of international scientific organizations that were either directly or indirectly involved with the Club of Rome and its members were the Science Committee of the North Atlantic Treaty Organization (NATO), the Science Director's Office of the Organization for Economic Cooperation and Development (OECD), the Institute of Applied Systems Analysis (IIASA), the Batelle Research Institute and the International Federation of Institutes of Advanced Study (IFIAS).⁷⁹

While Gillespie was only the Minister of State for Science and Technology for a year, it had been during the crucial foundational stage. At the end of his tenure, the minister was pleased with how the organization had evolved and argued it was "a

⁷⁸ Alastair Gillespie, "Memorandum to Dr. Aurele Beaulnes Re: Priorities for MOSST Our Discussion December 30, 1971, 31 December 1971," (NAC: R1526 VOL.26 File Ministers Memos to MOSST), p.2.

⁷⁹ J. Rennie Whitehead, "Chapter 13: The Club of Rome," in *Radar to the Future*, <http://www3.sympatico.ca/drennie/chap13.html>, (accessed 6 January 2005).

Institute of Applied Systems Analysis, *About IIASA: How IIASA Began*, <http://www.iiasa.ac.at/docs/history.html?sb=3>, (accessed 6 January 2005).

Batelle Research Institute, *About Batelle*, <http://www.battelle.org/more/default.stm>, (accessed 6 January 2005).

working and contributing arm to the Government.” He added that MOSST’s “role and potential [had] gained acceptance among its several publics – industry, universities, provincial research institutes, professional groups and the informed citizen.”⁸⁰ Although Gillespie’s left MOSST, the close ties that had emerged between the government department and the Club of Rome remained in subsequent years and led to cooperative ventures.

While Gillespie left his position pleased with MOSST’s progress and optimistic about its future, the department continued to face challenges related to being dependent upon voluntary cooperation from traditional departments and not having sufficient financial control over science budgets.⁸¹ Despite questions of operational effectiveness MOSST was strategically placed within the federal policy making structure ensuring it would be able to spread ideas and to help secure federal support for both futures and Club of Rome activities. MOSST had to develop national science policy “as the composite result of policies developed in various areas.”⁸²

The Lamontagne Committee report and key COR/CACOR individuals such as Whitehead and John Bradley, continued to exert an influence after Gillespie. In

⁸⁰ Alastair Gillespie, “Letter to Pierre E. Trudeau, 9 November 1972,” (NAC: R1526 Volume 326 File Trudeau), p.1.

⁸¹ An inherent flaw with MOSST’s operational effectiveness stemmed from the fact that its power was based upon voluntary cooperation from the departments. National Research Council President William G. Schneider commented in 1971 that while MOSST had the potential to be beneficial to Canadian science policy formation over the long term, the minister responsible would have required “operating muscle” to survive. To address the problem of operational effectiveness Volume Three of the Lamontagne Report called for a strengthening of MOSST’s powers and argued in favour of giving it real financial control over the development of science programs by forcing departments to make submissions to MOSST for approval. Although those recommendations were accepted in 1975-1976, the department continued to struggle under the time and workload pressures associated with the yearly budgetary process.

Schmidt, “US Embassy,” p.18.

Lamontagne Report, Vol. 4, pp.16-19.

⁸² MOSST, “Response of MOSST to Volume 2 of the Report of the Special Senate Committee on Science Policy, A Science Policy for Canada: Targets and Strategies for the Seventies, June 1972,” (NAC: R1526 Volume 25 File Ministry of State F16),, p.3.

September 1973 MOSST's Minister Jeanne Sauvé said that the Lamontagne recommendations had either already been accepted or were in the process of being implemented. Sauvé added that she and her staff examined "each and every recommendation in the Lamontagne report, to [her] great enlightenment and that of [her] officials."⁸³ Her successor, Charles Drury, commented in December 1975 that the Lamontagne Committee reports had 'constituted a significant background to all discussions of science policy matters and its influence [would] continue.'⁸⁴ James Hugh Faulkner, who replaced Drury as MOSST's head in 1976, concurred with his predecessor and said "the committee [had] made a profound impact on the development of science policy with the government."⁸⁵ In addition to being established through the efforts of the Senate Committee that was headed by a COR member, key COR members played a seminal role in developing MOSST's initial framework and early activities.

The Close MOSST – COR Relationship

Implied in MOSST's initial rationale was the intent to delve into the impact and interrelationships between scientific and technological innovations and the consequent environmental, economic and societal implications. Operating as a horizontal organization, MOSST needed to be interested in the interconnections between various science initiatives. It also needed to anticipate both challenges and opportunities at the national and international levels. The two components created a holistic approach to

⁸³ Jeanne Sauvé, "Commons Debates 12 September 1973," *Commons Hansard First Session Twenty-Ninth Parliament Volume VI, 1973*, (Ottawa: Queen's Printer, 1973), p.6469.

⁸⁴ C. M. Drury, quoted in Maurice Lamontagne "Senate Debates 16 November 1977," p.134.

⁸⁵ James Hugh Faulkner, quoted in Maurice Lamontagne "Senate Debates 16 November 1977," p.134. Senate of Canada, *Ministers of State for Specified Purposes*, <http://www.parl.gc.ca/information/about/people/key/MinisterState.asp?lang=E>, (accessed 26 August 2005).

science policy development that was in accord with the approach to policy development advocated by the Club of Rome. It was an approach that systems analysis was designed to aid.⁸⁶

MOSST subsequently became a major sponsor of COR and CACOR initiatives. In 1973 MOSST contributed \$25,000 to the Denis Gabor study “The New Research Imperative” and it was the substantial Canadian contribution that enabled the project to be conducted. Support for the project was described as being “consistent with the encouragement received by the Prime Minister.”⁸⁷ Gabor was a Hungarian-born scientist who won the 1971 Nobel Prize in Physics for developing the three-dimensional image technology known as Holography. The Nobel committee recognized the potential of the new technology, especially in the area of medical imaging technology, to enable scientists to move beyond inherent limitations of being restricted to two-dimensional imagery. They further added that the prize was in recognition of his cultural writings that put him in the company of other scientists and technologists who were deeply “concerned about the use or damage to which technical development can lead for mankind.”⁸⁸

Gabor’s autobiography noted that he had been trained in Germany but in the face of the rise of the Nazi Party fled to Britain in 1933. After working for decades in a variety of science environments, he became convinced “that a serious mismatch [had] developed between technology and our social institutions, and that inventive minds ought to

⁸⁶ MOSST, “Response,” p.3.

⁸⁷ J. Rennie Whitehead, “Memorandum to Dr. Maurice LeClair, 20 December 1974,” (CACOR Archives: File 301 CACOR Correspondence 1974), p.1.

Aurelio Peccei, “Preface,” in D. Gabor and U. Colombo, with A. King and R. Galli, *Beyond the Age of Waste: A Report to the Club of Rome, Second Edition*, (Oxford: Pergamon Press, 1981), p.ix.

⁸⁸ Erik Ingelstam, *The Nobel Prize in Physics 1971*, <http://nobelprize.org/physics/laureates/1971/press.html>, (accessed 31 October 2004).

consider social inventions as their first priority.”⁸⁹ The MOSST-sponsored Gabor project eventually was published as the 1978 Club of Rome Report, *Beyond the Age of Waste*. The text was a collaborative effort on the part of ‘technological optimists’ who were asked by the COR executive to examine the possible contributions of science and technology to overcoming the inherent constraints on growth identified in the 1972 *Limits to Growth* report. They were required to identify science and technology areas that had the potential to increase humanity’s “capacity to exploit and regenerate natural resources in order to sustain a satisfactory standard of living for the people of the world.”⁹⁰

MOSST became an important distribution centre for Club of Rome publications and proceedings within the federal bureaucracy. MOSST’s responsibilities included monitoring all federal futures studies activities, keeping up-to-date on private sector futures activities, establishing and maintaining international futures contacts, and being a contact point for groups and individuals outside government who sought futures information. As discussed in the next chapter, to fulfil its mandate the MOSST established a futures library and dedicated Secretariat for Futures Studies circa 1975. It also became active in helping to organize futures meetings.⁹¹

⁸⁹ Denis Gabor, *Autobiography*, <http://nobelprize.org/physics/laureates/1971/gabor-autobio.html>, (accessed 31 October 2004).

⁹⁰ Denis Gabor and Umberto Colombo, “Preface,” in D. Gabor and U. Colombo, with A. King and R. Galli, *Beyond the Age of Waste: A Report to the Club of Rome, Second Edition*, (Oxford: Pergamon Press, 1981), pp.xi-xii.

Peccei, “Preface,” pp.vii-viii.

⁹¹ As evident above, a close relationship emerged between MOSST and COR/CACOR in the mid-1970s. In a 1975 MOSST memo discussing the coordination of federal activities dealing with futures studies, the Club of Rome featured prominently. The top three international organizations providing policy planning and systems analysis insights to Canada were, in order, Institute of Applied Systems Analysis (IIASA), the Organization for Economic Cooperation and Development (OECD), and the Club of Rome. Similarly the top two, in order, of groups listed as having a strong interest in coordinating Canadian work in the futures area were: “The Canadian Committee [Association] for the Club of Rome [CACOR], The Canadian Committee for IIASA.”

Lamontagne, “Notes for an Address,” p.6.

The Close MOSST – CACOR Relationship

MOSST also developed a special relationship with the Canadian Association for the Club of Rome (CACOR) officially formed in 1974. CACOR's Secretary J. T. Bradley, who also served as a MOSST Policy Analyst, exemplified the extent of the close symbiotic relationship between MOSST and the Canadian Association for the Club of Rome (CACOR) in the first five years of MOSST's existence. On 27 August 1976, Americans Donald Lesh and Berrin Moore interviewed Bradley as a part of a feasibility study into establishing an United States Association for the Club of Rome (USA COR). The Americans were particularly interested in the Canadian experience due to the similarities of the two nations. As well in Canada, in contrast to other countries such as the Netherlands, the national COR association did not emerge as a result of widespread public interest in Club of Rome activities. The Canadian Association had been formed with the intent of providing "a way for the national membership to influence government more effectively."⁹²

Lesh and Moore had been struck by the apparent lack of administrative structures within the CACOR and noted how it seemed to parallel the "light" structure of the main COR organization. Both the COR and CACOR lacked any permanent staff and relied exclusively upon members who volunteered their time and effort. In Canada, it was estimated that each year CACOR activities occupied approximately three-person-years of work. The key activities included a regular newsletter, coordinating the dissemination of

A. R. Dobell, "Memo: Coordination of Federal Government Work on Futures Forecasting, Systems Analysis, and Long-Term Policy Studies, 18 November 1975," (NAC: RG102 ACC.1984-85/520 Volume 33 File 2120-S1-2 pt.1), pp.1-2.

⁹² Donald R. Lesh, "Letter to J. T. Bradley, 13 September 1976," (CACOR Archives: File 200: "USA COR-CACOR Correspondence"), p.1.

Jophn A. Harris and Berrin Moore, "Feasibility Study: Establishment of a U.S.A. Chapter of the Club of Rome," (CACOR Archives : File 300 "USA COR – Formation and Founding,") pp.11-12.

COR activities and sponsored reports in Canada, as well as being the COR's public relations arm in Canada. In addition to initiatives related to the international organization, the CACOR members were heavily involved in "assisting the government in developing procedures which insure[d] the presentation of the long-range view in policy matters."⁹³

In explaining the "light" nature and low-key approach of the CACOR, Bradley said that CACOR's "mode of operation [was] very much behind the scenes and they [felt] that they [could] accomplish much by encouraging positive initiatives and decisions, and ignoring all others."⁹⁴ Bradley further explained that the CACOR had few financial resources and rarely filed research funding applications. Instead of a direct formal approach, Bradley explained "the informal ties of [CACOR] members would lead to institutions or individuals competent in a field or special interest, who might already have some financial resources at their disposal." Bradley further added "The Association's close ties with the Canadian government also [had] made possible timely support from that source."⁹⁵

MOSST/CACOR and FIT

In the spring of 1974 the close MOSST-CACOR relationship was a catalyst for the emergence of a novel educational institution based in Toronto providing specialized training for the developing world. The Foundation for International Training (FIT) initiative was a product of the imagination and dedication of COR/CACOR member

⁹³ Harris and Moore, "Feasibility Study," p.13.

Don Lesh, "Memorandum to The Board of Directors 1 September 1976," (CACOR Archives: File 200: "USA COR-CACOR Correspondence,") p.1.

⁹⁴ Lesh, "Memorandum," p.2.

⁹⁵ Bradley was also an assistant to Rennie Whitehead, helped attain financial support from MOSST for various COR and IIASA initiatives.

Lesh, "Memorandum," p.2.

Whitehead Interview.

Ranjit Kumar. He was Kenyan-born but immigrated to Canada in the 1960s initially to work in private industry. Kumar wanted to become involved in the study of relations between the world's developed and the less developed nations and subsequently became involved with Seneca College's Centre for International Programs. However, after joining and observing the initiatives of the Club of Rome and its operations in dealing with governments and institutions, Kumar decided that it was necessary to form a separate organization outside the college. As mentioned in the introduction, Kumar, like other COR members, had worked within established bureaucracies but wanted to avoid the inherent problems of delay and dependence on others. As a result he was determined to establish a new agency that would "not be beholden to any institution."⁹⁶

Kumar's time at The Centre for International Programs led to important contacts being forged with the Canadian International Development Agency (CIDA) and its Special Programmes Branch Director, Lewis Perinbam. That relationship led to CIDA sponsoring a series of seminars on international development hosted by Seneca College that, in turn, led Kumar to contact Aurelio Peccei to come and present. It was an invitation that Peccei accepted and he added that he would bring with him COR co-founder Alexander King.⁹⁷

To facilitate the visit Kumar approached MOSST seeking \$5,700 in financial support to cover the costs associated with bringing Drs. Pecei and King to Canada for a series of lectures at the college. In his letter of request to MOSST's Secretary A. Beaulnes, Kumar said that King and Peccei had already accepted an invitation from

⁹⁶ Ranjit Kumar, Conversation with Author, January 2004. (Hereafter Kumar Interview)

⁹⁷ Ranjit Kumar, "Humanizing Development: Foundation for International Training in a Changing World," in Roseann Runte (editor), *The Foundation for International Training: Twenty-Five Years Dedicated to International Development*, (New York: Legas, 2001), pp.21-22.

Seneca College to speak there in May 1974 on “The Problematique Revisited.” King and Peccei were also to attend CACOR’s inaugural conference in Toronto on 2-3 May. Kumar added MOSST’s Rennie Whitehead, who was also a COR member, had suggested contacting Mr. Beaulnes at the Ministry for potential assistance.⁹⁸

Initially within MOSST there were concerns over setting a precedent for providing financial support to a secondary institution for a visiting speaker. However, it was decided to approve the request, albeit at a reduced amount of \$3,400, due to the expected public benefit from media coverage as well as to Canada’s scientific, business and academic communities with interests in future studies.⁹⁹ MOSST’s Policy Analyst J. T. Bradley added that MOSST’s sponsorship of the King and Peccei trips “were an indirect way of supporting” both Kumar at Seneca College and CACOR.¹⁰⁰ After much discussion, MOSST decided to contract Drs. King and Peccei at \$1600 and \$1800 respectively:

To attend at the invitation of the Ministry, the meeting in Toronto, Ontario on 2 and 3 May, of Canadian scientists interested in the Club of Rome Problematique, to present a public lecture at Seneca College of Applied Arts and Technology and meet with representatives of the government in Ottawa, if required.¹⁰¹

In providing a positive response to Kumar’s request A. Beaulnes said that there was “widespread support within” MOSST for the initiative and he asked to be informed

⁹⁸ Ranjit Kumar, “Letter to A. Beaulnes 12 March 1974,” (NAC: RG 102 Acc. 1984-85/520 Volume 4 File 1038-C7-2 pt.2), pp.1-2.

⁹⁹ G. Tremblay, “Letter to A. Beaulnes 8 April 1974,” (NAC: RG 102 Acc. 1984-85/520 Volume 4 File 1038-C7-2 pt.1), p.1.

¹⁰⁰ J. T. Bradley, “Letter to Aurelio Peccei, 1 August 1974,” (NAC: RG 102 Acc. 1984-85/520 Volume 4 File 1038-C7-2 pt.2), p.1.

¹⁰¹ J. A. F. Vieni, “Letter to Alexander King 29 April 1974,” and “Letter to Aurelio Peccei 29 April 1974,” (NAC: RG 102 Acc. 1984-85/520 Volume 4 File 1038-C7-2 pt.1), p.1 and p.1.

of future initiatives related to addressing global problems.¹⁰² The Peccei/King events were a success with over a thousand people in attendance at the seminars.¹⁰³ Other Canadian members of the Club of Rome, R. J. Whitehead, Ronald Ritchie and William Stadelman were also present at the seminars and it became an occasion to hold further discussions about international affairs.¹⁰⁴

Alexander King recalled that during the Seneca visit, Kumar approached Peccei and himself with a novel approach to improving the plight of lesser-developed nations. Kumar argued that “a grass roots approach with a multiplier mechanism” would be far more effective in bringing about real change in the Third World than the traditional top-down approaches that took far too long to trickle down and, in the process, became

¹⁰² A. Beaulnes, “Letter to Ranjit Kumar 11 April 1974,” (NAC: RG 102 Acc. 1984-85/520 Volume 4 File 1038-C7-2 pt.1), p.1.

¹⁰³ Kumar Interview.

¹⁰⁴ Stadelman used his connections as head of the Ontario Research Foundation to have members of the Ontario government attend the conference. The 1974 Seneca Seminars subsequently led to broader discussions of the Problematique and the interrelated nature of global events within the Ontario provincial government. In previous years Stadelman had arranged for King and Peccei to meet with scientists, industrialists and provincial government officials at the Sheridan Park Research Community to discuss the World Problematique. Subsequent meetings between Peccei, King and provincial bureaucrats, especially the 1974 meetings, led to King being asked to serve as an external science advisor to the provincial government.

King reflected that he had enjoyed advising the provincial government as it put him in “close and uncontroversial contact” with senior bureaucrats and provincial cabinet ministers. He said that his periodic visits, among other things, included dinner discussions about taking “one global topic and try to follow its impact in many different sectors. Such conversations lacked the sophistication of computer driven mathematical systems modelling but reinforced the basic idea of the interconnected relationships between global events at the macro and micro levels. It was a means to take the theoretical modelling ideas and discuss them in concrete terms. King gave an example of examining the issue of global warming with a resultant rise in ocean levels and how that would impact transportation in the Great Lakes. He added that the dinner conversations tended to be met with “a little scepticism on the part of a few, but the general reception was highly positive.” King felt that those present “achieved a deeper understanding of the practical importance of the problematique.” Ranjit Kumar said that having King as a Science Advisor kept “the Ontario government very much in the loop and interested” in COR initiatives.

Kumar Interview.

W. R. Stadelman, Email to Author, 8 March 2004.

Alexander King, Email to Author, 28 January 2004.

diffuse.¹⁰⁵ In contrast, the FIT idea was to strengthen “managerial capacities through training of trainers at management institutes and supporting organizational development of host agencies.”¹⁰⁶ Kumar related that King and Peccei became especially interested in the human development aspects of his proposal and that of using public administration as a means to improve the lot of the developing world by providing training to bureaucrats.¹⁰⁷

Convinced of merits of the proposed institution King, Peccei and Kumar agreed to pursue matters further. The next major step in the creation of FIT came at a COR Conference in Algiers in 1976. At the conference Jan Tinbergen was reporting on his COR-sponsored Reshaping the International Order (RIO) initiative and one of the external invitees to the conference was the CIDA’s Paul Gerin-Lajoie.¹⁰⁸ King, Peccei and Kumar approached Gerin-Lajoie to further discuss the idea of establishing FIT.¹⁰⁹ In Gérin-Lajoie, the COR members found an individual who was both deeply interested in international affairs and already convinced of the critical role of education in the advancement of international development.

Gérin-Lajoie’s background as Quebec’s Education Minister during the Quiet Revolution of the 1960s made him familiar with the potential role of education in

¹⁰⁵ Kumar argued that both sides of the ideological divide between the Communist Block East and the democratic West believed in “using top-down strategies that did little to tackle fundamental problems of under development.”

King, “Club of Rome and Canada Questions,” p.11.

Kumar, “Humanizing Development,” p.19.

¹⁰⁶ Kumar, “Humanizing Development,” p.22.

Kumar Interview.

¹⁰⁷ Kumar Interview.

¹⁰⁸ COR, “Special Meeting of the Club of Rome on The New International Order, Algiers, Algeria, 25-28 October 1976,” (CACORA: COR Algeria Meeting, Oct. 1976), p.1.

COR, Special Meeting of the Club of Rome on The New International Order, Algiers, Algeria, 25-28 October 1976: Participants Confirmed up to 20 September 1976,” (CACORA: COR Algeria Meeting, Oct. 1976), pp.1-2.

¹⁰⁹ Kumar Interview.

King, Email, p.11.

international affairs. As a provincial minister he was one of the key initial proponents of Quebec establishing an international presence separate from Canada.¹¹⁰ Gérin-Lajoie became convinced that Quebec's educational systems had much to contribute to the French speaking countries of the developing world.¹¹¹ During a 1963 speech to the Canadian Education Association (CEA) Gérin-Lajoie emphatically stated: "If Canada has a part to play in international affairs, advanced education, that will give rise to the establishment of centres of learning and to intellectual creativeness that will meet the highest standards, is an absolute necessity."¹¹²

Gérin-Lajoie later discussed with French President Charles de Gaulle the possibility of establishing multilateral educational institutions in francophone nations.¹¹³ In addition, Gérin-Lajoie secured \$300,000 from the Quebec government to fund a cooperative educational venture in Tunisia.¹¹⁴ Thirteen years after Gérin-Lajoie's CEA speech, the Foundation for International Training aimed to play the critical educational roles in international affairs that Gérin-Lajoie had previously felt to be of the utmost importance.

At the October 1976 Algiers meeting, Gerin-Lajoie became convinced of the merits of the FIT initiative and pledged to find ways to get CIDA to back the project.¹¹⁵

Kumar said that Gerin-Lajoie acknowledged that established international cooperation

¹¹⁰ National Archives of Canada, *Fonds Paul Gerin-Lajoie*, http://data4.collectionscanada.ca/netacgi/nph-brs?s1=lajoie&s2=&s6=&s10=&s11=&l=20&Sect4=AND&Sect1=IMAGE&Sect2=THESOFF&Sect5=MKDOPEN&Sect6=HITOFF&d=MIKA&p=1&u=http://www.collectionscanada.ca/archivianet/02012302_e.html&r=7&f=G, (accessed 15 March 2005), p.1.

¹¹¹ John Daniel Allison, "Federalism, Diplomacy and Education: Canada's Role in Education-Related International Activities, 1960-1984," (Unpublished PhD. Thesis: University of Toronto, 1999), p.54, pp.60-65, pp.75-77 and p.93.

¹¹² Quoted verbatim from Allison, "Federalism," p.57. Allison's footnote #118:

Canadian Education Association, *1963 Convention: Proceedings and Addresses* (Toronto: CEA, 1963). p. 30.

¹¹³ Allison, "Federalism," pp.62-63.

¹¹⁴ Allison, "Federalism," pp.76-77.

¹¹⁵ Kumar, "Conversation".

and aid programs “did little to strengthen indigenous institutions capable of managing self-reliant national development,” and that he “welcomed ideas that would open new avenues.”¹¹⁶ Gerin-Lajoie suggested that Kumar arrange a meeting with CIDA’s Lewis Perinbam. Perinbam enthusiastically endorsed the FIT initiative and instructed Kumar to incorporate the organization and to apply to CIDA for funding.¹¹⁷

Alexander King recollected that due to a meeting of minds, “Our intervention was successful... and quickly led to the creation of the Foundation for International Training for Third World countries with Ranjit as full time executive director.”¹¹⁸ Kumar’s previous experience with Perinbam, combined with the support of CIDA’s Gerin-Lajoie, King and Peccei meant that the process was fast tracked. By the end of 1976, within three months of the COR October meeting at Algiers, FIT was incorporated, successfully applied to CIDA for sustained funding, established an international Board of Directors and was fully operational, although it did not begin its first formal international development project until 1978.¹¹⁹ In the end ten COR members were involved in establishing FIT and in serving on its International Board of Directors. Alexander King served as its Chairman for the first eight years of operation and Aurelio Peccei served as the Chairman of the International Relations Committee.¹²⁰

Aurelio Peccei was a strong supporter of the FIT initiative as he viewed it as making a major contribution to improving the lot of developing nations. Peccei had previously helped to establish the International Institute for Applied Systems Analysis to

¹¹⁶ Kumar, “Humanizing Development,” p.22.

¹¹⁷ Kumar, “Humanizing Development,” pp.22-23.

¹¹⁸ King, “Club of Rome and Canada Questions,” p.11.

¹¹⁹ Kumar, “Humanizing Development,” pp.22-24.

¹²⁰ King, “Club of Rome and Canada Questions,” p.11.
Kumar Interview.

encourage the development of research into mathematical modelling techniques and applications.¹²¹ He viewed FIT as being the critical humanitarian component of the quest to find lasting solutions to the interconnected problems facing the developing world. IIASA operated at the scientific theoretical level and FIT was to operate at the pragmatic humanitarian level to produce local leaders who would return to their respective homelands to apply their knowledge and training to improve the relative lot of their constituents.¹²² Having played a key role in FIT's establishment, Kumar said the COR had "inspired FIT's mission and the orientation of its activities in subtle ways for many

¹²¹ While tangential to this dissertation, the story of Canada's involvement with IIASA is long, lasting from the organization's beginning up to budget cutbacks in the 1990s that caused Canada to sever its ties. The History of the IIASA notes that Lord Zuckerman, who represented the British Royal Society, did not share Peccei's views. His name carried weight as the British were critical financial backers of the IIASA project. Zuckerman threatened to withdraw British support for IIASA if Peccei's suggestions were followed. Author Alan McDonald commented that Peccei took great pains to avoid confusion between the IIASA and the separate Club of Rome initiative that he was also developing in 1968. McDonald added "his efforts were not always enough for Zuckerman, who was unenthusiastic about the global modeling that came to be featured in *Limits to Growth*."

A compromise was eventually reached where the IIASA agreed to host and document global modelling conferences. For example in from 29 April to 2 May 1974 IIASA hosted a large multi-national conference dealing specifically with the regionalized multi-level world models developed by Mihajlo Measrovic and Eduard Pestel in *Mankind at the Turning Point: The Second Report to the Club of Rome*. Canadian representatives at the 1974 IIASA conference included A. J. Coleman and A. Demirdache of the Ministry of State for Science and Technology. In 1984 the IIASA established the Peccei Scholarships for outstanding members of its Young Scientists Summer Program (YSSP) in honour of Peccei's integral role in establishing the IIASA and for his dedication to "a humanistic approach to the problems confronting the modern world."

The concluding chapter of this dissertation returns to the Canada-IIASA story as the contributing factors that led to Canada opting-out of the organization are analogous to the factors that led to the decline of influence of the COR in Canada.

International Institute for Applied Systems Analysis, *How IIASA Began*, <http://www.iiasa.ac.at/docs/history.html?sb=3>, (accessed 3 March 2005).

Institute for Applied Systems Analysis, "The YSSP at IIASA: Peccei And Mikhalevich Scholarships," *Options*, (Autumn 2002), pp.20-21.

Alan McDonald, "Scientific Cooperation as a Bridge Across the Cold War Divide: The Case of the International Institute for Applied Systems Analysis (IIASA)," *Annals of the New York Academy of Sciences*, (Volume 866, 1998), pp.55-83.

A. J. Coleman, "Report to MOSST on The Seminar on the Regionalized Multi-level World Model Held in Austria, April 29- May 2 1974 Under the Auspices of the International Institute for Applied Systems Analysis," (CACORA: File 814 Related Reports (Unpublished)), pp.1-3.

Paul Dufour Conversation with Author, April 2005.

¹²² Kumar Interview.

years.” He added that Peccei and King “had set FIT on a path that will remain their legacy as we move into the next century.”¹²³

Conclusion

A thumbnail sketch of the events leading up to FIT’s establishment illustrates the cascading effect mentioned in the introduction to this chapter. Senator Lamontagne used his position as chair of the Special Senate Committee on Science policy to push for a stronger, more rational, holistic and long-range approach to science policy development. His committee’s voice had extra weight added to it when COR members Alexander King and Saburo Okita presented similar criticisms and suggestions in their 1969 *OECD Review of National Science Policies for Canada*. MOSST was the end result and the government’s response to both reports. Within MOSST key figures such as Rennie Whitehead and J. T. Bradley had a strong interest in systems analysis and futures studies. Their interests melded with the first MOSST head, Alastair Gillespie’s, interests and translated into a symbiotic relationship emerging among MOSST and COR/CACOR.

The story of FIT’s formation also provides an excellent case study in how the COR was able to leverage its connections to further a cause. Despite being foreigners, Peccei and King decided to contact CIDA on behalf of a Canadian citizen, Ranjit Kumar, who worked within a Canadian organization, Seneca College, and was attempting to establish a separate Canadian organization, FIT. Peccei and King’s efforts to introduce

¹²³ Chapter six will discuss the decline of influence at the federal bureaucratic level associated at least in part to a paradigm shift in terms of attitudes towards the role of the marketplace in the creation of public policy. It was a problem that was also faced by the individuals at the Foundation for International Training in the 1990s. Kumar commented that in the 1990s there was a profound shift in the lexicon of international development and a shift in focus as “focus turned to good governance, democracy and privatization.” Kumar further added that changes at CIDA in terms of programs and personnel meant FIT lost formal linkages to the funding agency and as a result FIT had to refocus its activities.

Kumar, “Humanizing Development,” p.20, p.27 and pp.28-30.

Kumar to the right people, especially Paul Gerin-Lajoie, led to a successful initiative with strong federal government support.

The existence of sympathetic members within MOSST led, at the behest of COR/CACOR member Ranjit Kumar, to the sponsoring a trip to Seneca College by COR co-founders Aurelio Peccei and Alexander King. At the Seneca conference Kumar presented his idea and as a consequence was invited to a COR meeting in Algiers discussing a COR-sponsored project, *Reshaping the International Order*. That meeting led to an informal meeting with CIDA's Gerin Lajoie who himself was sympathetic to FIT's aims and who had the ability to arrange a meeting with CIDA's Lewis Perinbam, and to give the initiative his full support. The subsequent CIDA meeting went exceedingly well and FIT was fast-tracked for funding and was established by the end of 1976. While FIT was not a direct Lamontagne or COR/CACOR initiative, the Senator and these organization(s) played critical roles in its establishment as it was the ultimate result of events catalyzed by Kumar, Lamontagne, Whitehead, Peccei and King.

The COR sought to be a catalyst organization that would initiate interest, arrange studies and funding for projects, and then allow them to take on a life of their own. It was an attitude shared by Lamontagne. From his time as economics advisor in the Lester Pearson government he had tried to imbue the policy making process with a sense of the importance of long-range thinking in policy matters. He had several setbacks but this and the next chapter explain that by the mid-1970s he may have well felt successful at last in raising the profile of systems analysis and futures studies and entrenching them within institutions. In tandem this and the next chapter illustrate the zenith of influence of COR ideas in Canada.

Chapter 5: The Spread of Influence (Part 2)–Systems Beyond the Horizontal Axis 1971-1988

Club of Rome/ Canadian Association for the Club of Rome (COR/CACOR)

member and Senator Maurice Lamontagne was a long time idea practitioner of the importance of incorporating holistic long-range futures studies into the policy making process.¹ It was a view that echoed COR co-founder Aurelio Peccei's sentiments. As the Chairman of a major 1967 international conference on development and technical cooperation, Peccei said:

We have not yet well understood, nor thoroughly analyzed, the new relationships linking man to society and environment; nor the interrelations between the various societies of men in today's world...we need an entirely new type of anthropology to understand and manage today's world and pave the way for that of tomorrow – a world that will be marvellous or dreadful to live in depending on our success or failure.²

Two years later he stated in his 1969 work, *The Chasm Ahead*: "I am afraid that one day we will suddenly discover that something is irreparably changed in the world around us, and find ourselves face to face with some grave ecological crisis... we must not back into the future, but plan our way ahead."³ Lamontagne's and Peccei's sentiments resonated within Canada's bureaucratic setting and beyond. Chapter four dealt with how that resonance was evident in the creation of the Ministry of State for Science and Technology (MOSST) and in its initial operations. This chapter takes a wider view to show how concerns about the future and the need for holistic long-range studies captured a wider audience.

¹ Maurice Lamontagne, "The State of Future Studies in Canada," (NAC: MG 32 B-32 Volume 5, File "Discours,") p.6.

² Aurelio Peccei (General Chairman), *International Development 1967 International Technical Cooperation: Evaluation and Prospects*, (Dobbs Ferry: Oceana Publications, Inc., 1968), p.3.

³ Aurelio Peccei, *The Chasm Ahead*, (Toronto: The Macmillan Company, 1969), p.239, p.281.

Building on the previous chapter's foundation, this chapter explores further ramifications of the Lamontagne Committee and discusses the popularization of holistic futures studies from the mid-1970s to circa 1980. Specifically, this chapter deals with the developing interest in futures studies at the nascent Institute for Research on Public Policy (IRPP). The chapter then explores the creation of the Canadian Association for Future Studies (CAFS), CACOR's role in attaining Department of the Environment (DOE) sponsorship for doing a Canadian version of an American report prepared for President Jimmy Carter called *Global 2000*, and, finally, the role of COR/CACOR in the creation of the 5000 Days Project at the University of Guelph. The mid-1970s would prove to be the apex of achievement for Lamontagne's efforts to promote future studies efforts. It was also a time at which COR/CACOR influence in Canada reached its zenith. The chapter begins with a look at a second chance for Lamontagne to institutionalize futures research in Canada due to initial start up difficulties experienced by the IRPP.

A Futures Focus for the IRPP

The IRPP's story begins with long-time political and economic analyst Ronald S. Ritchie. He was asked by Trudeau to follow up on a promise in the 1968 Throne Speech to conduct a feasibility study for establishing a new public affairs research institute. After reviewing existing domestic public policy research institutes, such as the Economic Council of Canada and the Science Council of Canada, Ritchie's report concluded there were not enough research institutes doing research. The existing organizations were limited in the scope of their inquiries. With this in mind, he argued that Canada was in need of an additional research institute to deal with questions of public policy. He added

weight to his conclusions by arguing that Canada was in danger of falling behind the United States and Europe where well-organized, well-funded and active policy research institutes were examining questions of public policy, often incorporating futures studies elements into their analysis.⁴

Echoing Senator Lamontagne's belief that Canada was on the cusp of creating a new society, Ritchie said that the "certainties" that had guided the country for the previous decades had vanished and the country was in a transitional era. In order to effectively cope with the changing world, he thought it essential to establish an institute that would be sufficiently general in mandate to be of use to all levels of Canadian government. Ritchie further added: "Almost without exception the major questions which face Canadian makers of policy... cry out for multidisciplinary systems analysis, for studies which attempt to identify desired 'futures' and to chart the paths to them."⁵

Further support for a new research institution came from Canadian administrative expert J. E. Hodgetts. Published in the same year as the Ritchie Report, Hodgetts' 1971 article, "Public Power and Ivory Power," argued that healthy democracies required policy research centres outside the civil service to facilitate discussion without taking away the power of the bureaucratic decision-making machinery. While such forums were likely to lead to dissent and arduous public debate, it was not healthy to have policy knowledge concentrated in the hands of an inherently secretive civil service. Furthermore, attempts to involve the public through information officers, advisory bodies and royal commissions had proven to be ineffective. Hodgetts suggested establishing a Foundation for Applied Policy Research. In his view, the close relationship between the existing

⁴ Ronald S. Ritchie, *An Institute for Research on Public Policy - a Study and Recommendations*, (Ottawa: Canada Privy Council, 1971), p.13, 17-40, and 59-88.

⁵ Ritchie, *An Institute*, pp.41-42.

Canada Council and the government prevented it from assuming public policy research responsibilities. He argued that Canada required an “institutionalized *applied research* resource that would encourage continuous study of the prominent policy issues confronting the nation... a more careful and systematic planning of research.”⁶

Likewise, Ritchie’s final report emphatically supported the creation of a public policy research institute with broad terms of reference, with a \$10 million investment from the federal government, and with the ability to attract top-quality publicly spirited experts in various fields. In accepting Ritchie’s recommendations Trudeau’s government pledged for the seven-year period after its inception to match contributions up to \$10 million. Federal contributions were based upon a matching formula in which the provinces would contribute one third of the funds with a remaining third from the private sector. If maximized, the end result would have been a \$30 million IRPP endowment fund.⁷

Ritchie insisted that it was essential that the IRPP look beyond short-term concerns to medium and longer term issues. Immediate or short-term decisions would not involve the policy-oriented approach advocated for the proposed institute. A focus on the longer term and policy directions would help to keep the institute out of contemporary political controversies. Short-term considerations, especially economics, would have to

⁶ Italics in the original quote.

Ritchie, *An Institute*, p.13. pp.16-17.

J. E. Hodgetts, “Public Power and Ivory Power,” in Trevor Lloyd and Jack McLeod (editors), *Agenda 1970: Proposals for a Creative Politics*, (Toronto: University of Toronto Press, 1968), pp.269-271, pp.275-279.

⁷ Ritchie, *An Institute*, pp.51-52.

Institute for Research into Public Policy (IRPP), “Background Paper, December 1975,” (NAC: RG 102 Acc. 1984-85/520 Vol. 33, File 2120-S1-2 pt.1), pp.8-9.

Pierre E. Trudeau, “Commons Debates, 21 February 1973,” *Commons Hansard First Session Twenty-Ninth Parliament, Volume II, 1973*, (Ottawa: Queen’s Printer, 1974), pp.1496-1497.

be addressed by other research institutes.⁸ The year after the publication of *The Ritchie Report* the Institute for Research on Public Policy (IRPP) was formally established in April 1972 under the direction of the University of Calgary's A. W. R. Carrothers.⁹

However Carrothers and the IRPP staff encountered numerous challenges in establishing the IRPP as an active, credible research organization. IRPP historian Peter Dobell claimed that there were two key problem areas hampering progress. The first was a structural issue within the IRPP. There were organizational ambiguities over structure and the role of trustees who had to cope with a largely undefined, all-encompassing research mandate. And the second was an issue of focus. There was no clear identification of the specific IRPP research areas and utility of research results upon which to design a program of work.¹⁰ By 1975 Prime Minister Trudeau and his government were beginning to lose patience and were beginning to be pressured in parliament to justify the substantial public investment in the organization. By 1975 the federal government had contributed in excess of one and a quarter million dollars and the provinces and private sector had contributed an additional \$1,245,000. Despite the

⁸ Ritchie, *An Institute*, pp.53-54.

⁹ Fred G. Thompson, *Looking Back on the Future*, (Ottawa: Futurescan International Inc., 1992), p.11. IRPP, "Background Paper," pp.1-3.

¹⁰ Dobell further argued that Carrothers lacked the requisite skills to launch the new and ambitious institute on a trajectory that would have satisfied the exalted expectations that were associated with the IRPP. While Carrothers, President of the University of Calgary from 1969 to 1974, was an able and effective university administrator due to his abilities to find common ground between disputing parties, he was not fully prepared for the additional role as IRPP President. According to Dobell he had not expected to be responsible for fund raising activities and had limited abilities in that regard. Furthermore, while he had proven his ability to develop strong academic law courses he was not prepared to launch programs in a institute that had to be built from scratch. Carrothers' problems were exacerbated by a cautious approach based upon prolonged careful reflection. Dobell concludes that the IRPP first President "was out of his depth" and as a result the institute languished.

Peter Dobell, *IRPP, Institute for Research on Public Policy: The First Thirty Years*, (Montreal: Institute for Research on Public Policy, 2003), pp.17-19.

--- "Carrothers, Alfred William Rooke," in *The Canadian Who's Who Volume XIII 1973-1975*, (Toronto Who's Who Canadian Publications, 1975), p.167.

investment the IRPP had not completed any major studies or projects and, according to Senator Lamontagne, had “not established its credibility.”¹¹

Fortunately for the Prime Minister and IRPP supporters, Volume II of the Lamontagne Committee report presented a potential focus and way forward for the directionless IRPP. Chairman Lamontagne used the second volume of the final committee report as a platform to launch a concerted effort to institutionalize long-range futures research in Canada. In the wake of his earlier unsuccessful attempt to imbue the Economic Council of Canada (ECC) with a long-range focus, the IRPP was his second chance to institutionalize futures studies. The purpose of the second volume had been to “build a coherent policy for Canada” by examining immediate and future problems and opportunities and through suggesting structural changes and innovations to better improve both the creation of science policy and the conduct of Canadian scientific research.¹²

The Lamontagne Committee report expressed a strong belief that while the future was not precisely knowable, “goals, problems, and options that [lay] ahead [were] not

¹¹ In May 1975 in the House of Commons Liberal MP Francis Fox asked the President of the Privy Council, Mitchell Sharp, when Canadians, who had come to expect much from the IRPP, would “really start its operations and start issuing the kind of reports and work which [were] expected from it.” In response Sharp said that it was “hoped” that the IRPP would “get underway with some major project in the field of research and public policy in the next few months.”

IRPP, “Background Paper,” pp.8-9.

Trudeau, “Commons Debates, 21 February 1973,” pp.1496-1497.

Francis Fox, “Commons Debates 22 May 1975,” *Commons Hansard First Session Thirtieth Parliament, Volume VI*, (Ottawa: Queen’s Printers, 1975), p.6029.

Mitchell Sharp, “Commons Debates 22 May 1975,” *Commons Hansard First Session Thirtieth Parliament, Volume VI*, (Ottawa: Queen’s Printers, 1975), p.6029.

¹² The Senate committee utilised the Club of Rome-sponsored research at MIT to help provide the overview of global challenges and concerns for the future. Volume two of *The Lamontagne Report* used a preliminary report from the MIT Systems Dynamics Group, a report that would evolve into *The Limits to Growth*, to illustrate the dangers of complacency, “the dark side of technology,” and for the need for careful consideration of science and technology to stop “the collision between nature and mankind.”

Lamontagne Report, Vol. 1, p.15.

Maurice Lamontagne (Chairman), *A Science Policy for Canada: Report of the Senate Special Committee on Science Policy, Volume 2: Targets and Strategies for the Seventies*, (Ottawa: Queen’s Printer for Canada, 1972). (Hereafter *Lamontagne Report Volume 2*)

completely unknown... by study [they could] attempt to understand some of the things [they had to] do to achieve... long term objectives.”¹³ The committee further expressed its opinion that the ECC had neglected long-term studies in their work and that it ought to expand its areas of study to establish a specific Committee on the Future examining the years 1985 and 2000.¹⁴

While the Lamontagne report indicated that the ECC would assume major responsibility for conducting and disseminating long-term research at the national level, higher powers had different plans. Prime Minister Trudeau and the Privy Council Office (PCO) perceived future studies initiatives as a means to provide the IRPP with a much needed defined purpose and focus for its attention. Suggestions geared towards the ECC in the Lamontagne report were suggested as goals for the IRPP.¹⁵ The idea of a futures-orientation for the IRPP was not new. In October 1971, MOSST’s head Alastair Gillespie announced a plan to establish the IRPP at an Organization for Economic Cooperation and Development (OECD) meeting. He described it as a combination of a think tank and a “futures operation”. He added that the new institution was “another attempt to come to terms with the future and to anticipate the future.”¹⁶ However, it took until the Lamontagne Committee’s second report for the IRPP to make significant progress in the futures field.

In February 1975, Trudeau responded to Senator Lamontagne’s letter concerning the possibility of federal support for a Senate-sponsored conference on the future. In the

¹³ *Lamontagne Report, Vol. 2*, p.406.

¹⁴ *Lamontagne Report, Vol. 2*, pp.407-408.

¹⁵ Maurice Lamontagne, “The State of Future Studies in Canada,” (NAC: MG 32 B-32 Volume 5, File “Discours,”) p.18.

¹⁶ Alastair Gillespie, “Transcript of a Statement by the Honourable Alastair Gillespie Minister of State for Science and Technology Meeting of Ministers of Science of O.E.C.D. Countries October 13-14, 1971,” (NAC: R1526 Volume 14 OECD File 2), p.7.

reply Trudeau stated that the IRPP had “taken longer to start than I had hoped... It would seem in effect that this organization should initially be given the responsibility of the important tasks which [Lamontagne Committee had] so well defined.”¹⁷ Subsequently, in April 1975, CACOR member C. R. (Buzz) Nixon, Deputy Secretary to Cabinet, wrote to IRPP director A. W. R. Carrothers suggesting the institute use current data as a base and then to conduct trend analysis into the future using the suggested dates of 1985 and 2000 as benchmarks to see how trends might develop. The letter also suggested the drafting of an IRPP proposal that could form the basis of a contract providing PCO funding for IRPP projects.¹⁸ This was to generate revenue beyond the attempts to establish the \$30 million endowment mentioned previously. As a result the IRPP worked in conjunction with the PCO “with a view to serving as a catalyst and clearing house for forecasting studies in Canada.”¹⁹

The IRPP appeared to be an excellent candidate to take charge of futures studies initiatives. A 1970-1971 Science Council report had recommended the establishment of a Futures Canada Institute that was similar in structure and intent to the suggestions contained in the *Ritchie Report* that laid the IRPP’s foundations. The Science Council’s Arthur Cordell found that there was a great deal of commonality between the ideas presented in the two studies. He further added that there appeared only to be “minor

¹⁷ Pierre Trudeau, “Letter to Maurice Lamontagne, 21 February 1975” quoted by Maurice Lamontagne, “Senate Debates, 10 July 1975,” *Senate Hansard First Session, Thirtieth Parliament Volume II 1974-1976*, (Ottawa: Queen’s Printer, 1975), p.1171.

¹⁸ IRPP, “Background Paper,” p.4.

C. R. Nixon, “Letter to A. W. R. Carrothers 1 April 1975,” quoted by Maurice Lamontagne, “Senate Debates, 10 July 1975,” pp.1171-1172.

¹⁹ IRPP, “Background Paper,” p.4.

Senate Committee, “Senate Debates Appendix,” pp.1171-1173.

differences” in terms of time horizons and the extent to which systems could be changed to accommodate future Canadian needs.²⁰

By 1975, the IRPP’s initial director, A. W. R. Carrothers, had been replaced by former Senator John Aird. Carrothers, however, remained involved with the IRPP. Aird asked Carrothers to meet with Buzz Nixon and Senator Lamontagne to discuss the potential futures studies role(s) for the IRPP. As a result, a series of meetings were held in May and June of 1975 and George Lindsey from the Department of Defence was asked to prepare a background paper on the institute to discuss the feasibility of it working in the futures field.²¹ Lindsey used the wording of the initial letter from the PCO’s Nixon to argue against the IRPP accepting substantial responsibility for the bulk of recommendations from *The Lamontagne Report*. While not averse to conducting PCO funded trend analysis, Lindsey argued that the organizing of an international conference and the establishment of an information centre for future studies went “beyond the program implied by the PCO letter.”²² In lieu of a full-fledged futures studies program he proposed the IRPP initially conduct a program “modest in scope, more in the nature of an exploratory beginning than a Great Leap Forward.”²³

The IRPP’s four criteria used for proposals reflected *The Ritchie Report* recommendations in terms of being supplemental to existing research and examining

²⁰ Arthur J. Cordell, “‘An Institute for Research on Public Policy’ Ronald S. Ritchie: A Summary and Comparison with the ‘Futures Canada’ Institute Proposed in Science Council Annual Report NO., 1970-71,” (NAC: R1526 Volume 13 File Science Council), p.3, p.5, and p.6.

²¹ G. R. Lindsey, “Proposal for Future Studies, 17 November 1975,” (NAC: RG102 AC.1984-85/ 520 Volume 33 File – 2120-S1-2 pt.1).

Special Committee of the Senate on Science Policy, “Senate Debates Appendix: First Report, 10 July 1975,” *Senate Hansard First Session, Thirtieth Parliament Volume II 1974-1976*, (Ottawa: Queen’s Printer, 1975), pp.1171-1173. (Hereafter Lamontagne Committee)

²² Lindsey, “Proposal for Future,” p.1.

²³ Lindsey, “Proposal,” p.2.

Thompson, *Looking Back*, p.11.

medium and long term considerations. The first concern was that the study be based five to twenty-five years in the future and in a topic area in which significant change was likely to occur. Secondly preference was given to novel research areas or to applying new means for examining established research topics. Projects also had to exhibit an obvious use for the results of the research and, finally, projects had to be able to be completed within the allotted time and financial constraints.²⁴ Finally, four years after the release of the *Ritchie Report* the IRPP appeared poised to begin active public policy research.

A major step forward for the organization and for its futures studies initiative occurred in 1977 when, future President of the Canadian Association for the Club of Rome, Michael Kirby was appointed to lead the IRPP.²⁵ Anxious to provide concrete outputs “to demonstrate the Institute was in business,”²⁶ Kirby orchestrated a publication

²⁴ Echoing Lamontagne’s criticism of the Economic Council of Canada’s initial assumptions based upon a stable international situation, Lindsey argued that long term forecasting was of questionable value to Canada whose economic future was sensitive to international changes. Instead the IRPP suggested initial reports deal only with the matters affecting economic and technological trends and Canadian society.

In 1975 the first major IRPP work being researched involved general Canadian population trends. It was a most basic consideration that was likely to impact future Canadian public policy in a wide range of policy areas. The second report was to be more specific on the impact of aging populations with the results being applicable in the social services, housing, health care and income security policy areas. The Institute also planned to conduct a through study on communications and transportation with the expectations that the results could help forge a consensus between the federal and provincial governments on related policy issues.

IRPP, “Background Paper,” pp.2-3.

Lindsey, “Proposal,” p.3.

²⁵ Kirby’s credentials were impressive. He had taught at various universities including the University of Chicago, and Kent University in England before settling in at Dalhousie University in Halifax in 1969-70. There he became the Assistant Dean of Arts and Sciences while teaching courses on Communications and Business Administration. From 1973 to 1974 he was both the Director of the Government Studies Program at Dalhousie and the Principal Assistant to Nova Scotia Premier Gerald Regan. In 1974 he moved to federal politics where he served as Prime Minister Trudeau’s Principal Assistant Secretary until 1976.

In addition Kirby had previously been Canada’s representative on the International Institute for Applied Systems Analysis (IIASA) in Austria. It was an organization that was tangentially associated with the Club of Rome whose founder, Aurelio Peccei, was also instrumental in establishing the IIASA. Prior to becoming IRPP president, Kirby arranged to have the IRPP become affiliated with the IIASA.

Elizabeth Lumley, (editor), “Kirby, Hon. Michael J. L.,” in *Canadian Who’s Who 2003 Volume XXXVIII*, (Toronto: University of Toronto Press, 2003), p.723.

Dobell, *IRPP*, p.21.

²⁶ IRPP, “Publications Available, July 1982,” in W. T. Stanbury and Fred Thompson, *Regulatory Reform in Canada*, (Montreal: Institute for Research on Public Policy, 1982), pp.135-137.

schedule that witnessed the publication of thirty-nine books, including four in French, from 1978 to 1980 inclusive. He also established *Policy Options* as a regular journal to disseminate IRPP research.²⁷ In addition Kirby and Chairman John Aird successfully attracted funding from the American Ford Foundation, the Canadian Donner Foundation as well as from Canadian provinces and the private sector. Personal requests to the provinces netted over \$6 million with an additional \$2 million from the private sector. Eventually Kirby succeeded in creating a \$20 million endowment for the IRPP, two-thirds of the \$30 million envisioned in the *Ritchie Report* that led to its creation.²⁸

With new revenues and an active research program Kirby decided it was time for a change. In 1977, he introduced organizational reforms that created six key research areas including a \$1.3 million Futures Studies section headed by David Hoffman.²⁹ Hoffman had previously held the position of Director of the Intergovernmental Planning Secretariat of the Intergovernmental Relations Branch of the Ministry of State for Urban Affairs.³⁰ IRPP's futures research efforts were aided by the insistence from Prime

Dobell, *IRPP*, p.22.

²⁷ IRPP, "Publications," pp.135-137.

Dobell, *IRPP*, p.22.

²⁸ As mentioned above the federal government had committed for the first seven years of operation to match contributions to the IRPP dollar for dollar up to a maximum of \$10 million. By 1979 the deadline was supposed to have expired; however, Aird and Kirby successfully convinced the Trudeau government to extend the time frame and to include revenues from contract work as being eligible for matching funds. The end result was the federal government fulfilled its \$10 million commitment.

Ronald Ritchie, *An Institute*, pp.51-52.

IRPP, "Background Paper," pp.8-9.

Trudeau, "Commons Debates, 21 February 1973," pp.1496-1497.

Sharp, "Commons Debates 22 May 1975," p.6029.

Dobell, *IRPP*, p.22, pp.29-31.

²⁹ The other five sections were: Ethnic and Cultural Diversity, Regulation and Government Intervention, International Economics, Regional Employment Opportunities and Natural Resources.

Dobell, *IRPP*, p.22.

³⁰ - "Biographical Sketches of Speakers and Discussants: David Hoffman," in Walter Baker (editor), *Shaping the Future: Canada in a Global Society 1978 Conference Proceedings*, (Ottawa: University of Ottawa – Centre for Policy and Management Studies, 1979).

Dobell, *IRPP*, p.22.

Fred G. Thompson, *Looking Back on the Future*, (Ottawa: Futurescan International Inc., 1992), p.13.

Minister Trudeau and the PCO that the IRPP take responsibility for catalyzing future studies on a national scale.³¹

Senator Lamontagne lamented that from the initial 1972 suggestion of the creation of a futures institute to the IRPP taking responsibility in 1977, there was a lost five-year period. However he was pleased that there appeared to be significant movement forward on the issue.³² The IRPP received substantial financial support from the PCO and produced numerous studies on futures topics such as the future of trading relations with Japan and the future of technology in specific resource sectors. In addition, the impact of emerging computer and communication technologies on business, governments and society was examined. Other topics examined the impact of Quebec nationalism and the future of health policy.³³

In addition to conducting future studies, the IRPP was also asked to take responsibility for establishing a broader national network for future studies and for organizing an initial conference to lay its foundations. It became apparent to the Special

³¹ Pierre Trudeau, "Letter to Maurice Lamontagne, 21 February 1975" quoted by Maurice Lamontagne, "Senate Debates, 10 July 1975," *Senate Hansard First Session, Thirtieth Parliament Volume II 1974-1976*, (Ottawa: Queen's Printer, 1975), p.1171.

C. R. Nixon, "Letter to A. W. R. Carrothers 1 April 1975," quoted by Maurice Lamontagne, "*Senate Debates*, 10 July 1975," pp.1171-1172.

³² Maurice Lamontagne, "Notes for an Address by Senator Maurice Lamontagne at Conference of the Canadian Association for Futures Studies held at Queen's University, Kingston June 9-11, 1977," (NAC: MG32 B32 Volume 5 File Discours 3), pp.4-5.

³³ Thompson, *Looking Back*, p.13, p.89.

Zavis Zeman, *The Men With the Yen*, (Montreal: Institute for Research on Public Policy, 1980).

C. C. Gotlieb, *Towards a National Computer and Communications Policy: Seven National Approaches*, (Toronto : Institute for Research on Public Policy, 1980).

W. E. Cundiff, *Nodule Shock? : Seabed Mining and The Future of the Canadian Nickel Industry*, (Montreal: Institute for Research on Public Policy, 1978).

Robert Arnold Russel, *The Electronic Briefcase : The Office of the Future*, (Montreal: Institute for Research on Public Policy, 1978).

Zavis P. Zeman and David Hoffman (editors), *Dynamics of the Technological Leadership of the World : Report of a Round Table Sponsored by the Futures Studies Program of IRPP held in Montreal, 11 April, 1979*, (Montreal: Institute for Research on Public Policy, 1980).

Leroy O. Stone, *Canadian Population Trends and Public Policy Through the 1980s*, (Montreal: Institute for Research on Public Policy by McGill-Queen's University Press, 1977).

Senate Committee on Science Policy, known as the Lamontagne Committee, that the new IRPP responsibilities made their role redundant. As a result the Lamontagne Committee recommended that its “mandate to hold a conference for the purpose of determining the feasibility of establishing a Commission of the Future be terminated.”³⁴

The removal of the Senate from the organizational and planning stages of a proposed national conference caused concern for Lamontagne, his committee and external supporters of an activist Senate. While the transference of a futures conference responsibility to the IRPP would deny the Senate an active role in organizing and in the operations of the conference, Lamontagne, supported by other Senators, refused to be relegated to the sidelines. The Senate reluctantly accepted that the IRPP would take responsibility for a national futures conference, but then subsequently decided to reinvigorate the Special Senate Science Committee with a new mandate designed to both aid the IRPP in its task and to assess the relative impact of its initial report.³⁵

The Senate Committee was of the opinion that if the IRPP were to accept responsibility for organizing a national futures studies conference to be the catalyst for a new national association, it would need substantial help. As a result the 1975 updated questionnaire was designed to provide the IRPP with the most current picture possible of Canadian futures studies activities.³⁶ Largely due to Lamontagne’s insistence, continued

³⁴ Senate Committee, “Senate Debates Appendix,” pp.1172-1173.

³⁵ Senate Committee, “Senate Debates Appendix,” p.1173.

J. E. Carter, “Letter to Maurice Lamontagne 12 January 1976,” (NAC: RG102 AC.1984-85/ 520 Volume 33 File – 2120-S1-2 pt.2), pp.2-3.

³⁶ Being cognisant of asking departments and various organizations to re-answer questions that had been addressed a few years before, Lamontagne and the Committee went to great lengths to have responses as succinct as possible and agreed to the central organizations submitting a response on behalf of the various departments. Ministry of State for Science and Technology’s (MOSST) D. B. Dewar related that Lamontagne stressed his desire not to create unnecessary duplicative work and his willingness to rely on existing data supplied from MOSST, if it were deemed sufficient by the Senate Committee. Beneath Lamontagne’s desire to avoid duplication of effort, was a message that the Senate review had to be taken

pressure by the Senate as a “watch dog” over futures studies in the federal government began to pay dividends beyond governmental circles. However the institutions of government that had developed a close relationship with COR/CACOR, such as the PCO, MOSST and IRPP, were also instrumental in establishing a national organization dedicated to futures studies — the Canadian Association for Future Studies (CAFS).

The Creation and Growth of the Canadian Association for Futures Studies

Federal support for futures initiatives in the mid-1970s was part of a broader futures movement that appeared to be gaining national recognition and momentum at the governmental, business and popular levels of Canadian society. Evidence for the growing support of the futures movement was found at the initial “Future Studies in Canada” conference hosted by the Education Faculty at the University of Western Ontario (UWO) in London, Ontario in February 1976. The success of this meeting led to the formal creation of the Canadian Association for Future Studies (CAFS) later in the year.³⁷

Senator Lamontagne’s Committee had envisioned increasing interest in futures studies at the national and international levels. The Senate’s interest in the topic led to an opportunity to create a national futures organization along analogous lines to what had been advocated in 1972 in the Lamontagne report’s *Volume Two*.³⁸ The IRPP, MOSST and the Senate played leading roles in the organization and operation of the conference.

Conference planners were motivated by a belief that if fifty to sixty futures-minded

seriously and that the Committee would ultimately decide if sufficient information had been received, or if departments would have to be consulted.

D. B. Dewar, “Notes for Meeting with Departments 6 November 1975,” (NAC: RG102 Acc. 1984-85/520 Volume 33 File 2120-S1 pt.1), pp.1-3.

³⁷ -- “Formation of the Canadian Association for Future Studies,” *Futures Canada*, (Volume 1 No.1, 1976), p.1.

Robert Bradley, “Futures Studies in Canada,” *Futures*, (Volume 8 No.2, April, 1976), pp.185-186.

³⁸ Thompson, *Looking Back*, p.13.

individuals could be gathered together to discuss their respective work, a basis could be laid for the establishment of a national organization. To the organizers' delight over two hundred attended the conference with two-thirds of that number becoming founding CAFS members.³⁹

Included among the list of participants at the inaugural futures conference were representatives from the federal government and federally supported agencies. The IRPP, Treasury Board, Privy Council Office, the Economic Council of Canada, the Science Council of Canada, and Environment Canada played active roles in presenting on their respective agencies' futures activities and its role in policy development. Futures-minded organizations such as the Club of Rome, the World Futures Society were involved as well as numerous universities from Ontario, Quebec and Manitoba.⁴⁰

The 1977 meeting at Queen's University attracted approximately 600 people to discuss the theme of "Shaping the Future."⁴¹ It was decided to have an open-ended conference title to attract a wide range of interests and to prevent specific futures areas, such as the future of energy, or international relations concerns, from dominating proceedings. Despite, or perhaps because of, the undefined criteria for the conference the initial call for papers in November 1976 met with little response, with only two or three abstracts being submitted. Conference organizers decided, with success, to directly recruit futures individuals from a variety of backgrounds with experience in presenting at conferences. The Senate Office of Maurice Lamontagne, as well as MOSST's Mike

³⁹ -- "Formation," p.1.

⁴⁰ -- "Program Extracts from the Founding Conference – February 6 and 7, 1976," *Futures Canada*, (Volume 1 No.1, 1976), pp.2-3.

⁴¹ Maurice Lamontagne (Chairman), *A Science Policy for Canada: Report of the Senate Special Committee on Science Policy, Volume 4: Progress and Unfinished Business*, (Ottawa: Minister of Supply and Services, 1977), p.65, (Hereafter *Lamontagne Report, Vol. 4*).

Stevens, aided conference organizers by giving administrative support and advice. The end result of their efforts produced an intense conference that hosted seventy sessions spanning eight key topic areas including basic overview of futures studies and various methodologies, Canadian concerns and activities, as well as images of the future and the role and development of futures education.⁴²

Building upon the success of the first two Canadian Association for Future Studies (CAFS) national conferences, the CAFS Executive decided to further explore the Shaping the Future theme but to do so within the Canadian context. As a result the 1978 CAFS annual national conference, held at the University of Ottawa, brought together the public, private and academic sectors to discuss “Shaping the Future: Canada in a Global Society”. The conference was a collaborative effort involving the Canadian Association for Future Studies, the Canadian Association for the Club of Rome, the Science Council of Canada, the Economic Council of Canada, the Institute for Research on Public Policy and the Centre for Policy Management Studies at the University of Ottawa. Funding for the conference was provided by the collaborators with additional funding and in-kind contributions from the Department of Public Works, the Privy Council Office, the Public Service Commission of Canada and the Pitney-Bowes Corporation.⁴³

The honour of chairing the conference and delivering the opening remarks was, appropriately, given to Maurice Lamontagne. In his address he described the conference as “an important, indeed unprecedented, event in Canadian history... a conference that

⁴² Don Nightingale, “Personal Reflections on the 1977 Futures Conference,” *Futures Canada*, (Vol.2 No.1, 1977), pp.8-9.

Cathy Starrs, “Reflections on the Kingston Conference,” *Futures Canada*, (Vol.2 No.1, 1977), p.9.

⁴³ Baker, *Shaping the Future*, p.ix, pp.xiv-xv.

has as its goal shaping the future of Canada in the global society.”⁴⁴ Due to the efforts of civil servant, CACOR and CAFS member Fred Thompson, the 1978 “Shaping the Future” Conference Papers were later distributed and discussed at the federal bureaucratic level. At a combined meeting of the Privy Council Office, the Prime Minister’s Office and the Federal Provincial Relations Office staff in December 1978, Thompson had the conference papers distributed. In addition to ensuring a presence for the CAFS at the senior bureaucratic level, Thompson and others hoped the move would help with additional sales of the published conference proceedings slated for 1979.⁴⁵

The 1977 supplemental Senate Science Committee Report held out optimism for CAFS’ future, but added that to be effective it would have to be an effective impartial observer and critic and would need substantial public and private support to succeed.⁴⁶ Based upon the success of the first two annual national CAFS conferences the organization appeared to be well on the way to becoming a major national public policy player. The 1976 conference surpassed expectations when approximately two hundred attended a conference that was initially expected to attract 50 to 60 experts.⁴⁷ Similarly, the 1977 conference attracted over 600 attendees, 40% of whom were not CAFS members; approximately 500 had been anticipated to attend.⁴⁸

At the same time, the organization was establishing a presence in regions across the country. Under the direction of Janice Tait, the Montreal Futures Society decided to support CAFS by reconstituting itself as a CAFS affiliate.⁴⁹ CAFS coordinators were

⁴⁴ Maurice Lamontagne, “Opening Remarks,” in Baker, *Shaping the Future*, p.3.

⁴⁵ F. G. Thompson, “Note Re: “Excerpts of Papers From the Conference “Shaping the Future Ottawa August 23-27, 1978” 15 December 1978,” (J. Rennie Whitehead Personal Archive, Ottawa), cover.

⁴⁶ *Lamontagne Report, Vol. 4*, pp.65-66.

⁴⁷ -- “Formation,” p.1.

⁴⁸ Nightingale, “Personal Reflections,” p.8.

⁴⁹ -- “Recent Events,” *Futures Canada*, (Volume 1 No.1, 1976), p.5.

established in eastern and central Canada at Halifax, Montreal, Kingston, Toronto, St. Catherines, London and Windsor. In Western Canada CAFS coordinators operated in Regina and Victoria.⁵⁰ From this base the organization positioned itself for expansion to become a major national organization.

The network continued to expand. Liaison efforts with external groups, such as the CACOR, were established early in the CAFS' operations. CAFS members, and future CACOR members, Fred Thompson, Leon Katz and Janice Tait along with CAFS member Saul Silverman, attended the June 1976 CACOR conference in Ottawa to discuss cooperative ventures and possibilities.⁵¹ By the end of 1976, CAFS membership stood at 435 and a new affiliate chapter in Edmonton had been established.⁵² In 1977, the CAFS executive was pleased that they had active members in all Canadian provinces except Newfoundland and Labrador. New branches had been established in Peterborough, Winnipeg, Calgary, and Prince Albert.⁵³

However, CAFS was cognisant of a relative lack of regional members. Its executive was drawn only from four central provinces - Quebec, Ontario, Manitoba and Saskatchewan. In terms of membership the vast majority of CAFS members, 310, were from Ontario followed by Quebec with 84 members and Alberta with 31 members. Both British Columbia and Saskatchewan had 18 members while Manitoba had 10 members. The Atlantic region had a scant seven members with five from Nova Scotia, and one each from New Brunswick and Prince Edward Island.⁵⁴

⁵⁰ -- "CAF Coordinators," *Futures Canada*, (Volume 1 No.1, 1976), p.8.

⁵¹ -- "Recent Events," p.5.

⁵² -- "CAFS Executive Report," *Futures Canada*, (Volume 1 No.2, 1976), p.4.

-- News from Local Affiliated Societies," *Futures Canada*, (Volume 1 No.2, 1976), p.6

⁵³ Fred G. Thompson, "President's Letter," *Futures Canada*, (Volume 2, No.1, 1977), pp.7-8.

-- "New Coordinators," *Futures Canada*, (Volume 2, No.1, 1977), p.13.

⁵⁴ Thompson, "President's Letter," pp.7-8.

In 1980, CAFS partnered with the United States-based World Futures Society (WFS) to organize and host the First Global Conference on the Future that brought futurists from around the world to Toronto. Approximately 6000 individuals attended the conference including approximately a hundred from lesser-developed nations. The three main categories of the conference dealt with humanistic, global and management concerns. Humanistic concerns covered such topics as social organization, food supplies, health, values and religion. Global concerns reflected the interrelated nature of the world, challenges such as: natural resources, population, the state of the oceans, science and technology. The third main section, management concerns, dealt predominantly with future studies methodologies and controversies.⁵⁵

While not all presentations were printed, the conference resulted in the book *Through the '80s: Thinking Globally, Acting Locally* being published later the same year. In addition to a foreword by Canada's Governor-General Edward Schreyer, an introduction by Canadian activist Maurice Strong and a postscript by Club of Rome Founder Aurelio Peccei, the book contained sixty articles. The contributing authors included the author of the widely popular book *Future Shock* Alvin Toffler; noted international physicist Isaac Asimov; long-time environmentalist Lester Brown; founder of the Hudson Institute futurist Herman Khan; and Club of Rome members Clive Simmonds and Ervin Laszlo.⁵⁶

⁵⁵ The conference combined the third general WFS conference with the fifth CAFS annual conference.
--"Note," in Frank Feather (editor), *Through the '80s: Thinking Globally, Acting Locally*, (Washington: World Future Society, 1980), p.vii.

"Contents," in Feather, *Through the '80s*, pp.iii-vi.

-- "The First Global Conference on the Future," *CACOR Newsletter* (Number 4, 1980), (CACORA: File 5018 CACOR Newsletter), p.5.

⁵⁶ --"Note," in Feather, *Through the '80s*, p.vii.

-- "Contents," in Feather, *Through the '80s*, pp.iii-vi.

The conference and 1980 publication were the high point of activity for the CAFS. The next chapter examines political, popular and intellectual shifts in the 1980s that caused prospective holistic thinking to fall out of favour and lose resonance among the general population and among policy makers. First, however, this chapter examines the last two major CACOR initiatives. The first was federally supported while the second was the result of the efforts and sponsorship of a private citizen. Taken together, the two initiatives foreshadow the elements of decline that are explored in the following chapter.

CACOR/ the Department of the Environment and the Global 2000 Project

Like the Ministry of State for Science and Technology (MOSST), the Department of the Environment (DOE) was envisioned with systems thinking in mind. Political scientists Bruce Doern and Thomas Conway argue that the interest at the Privy Council Office (PCO) and Treasury Board in rational planning techniques influenced the shape of the DOE. For example, CACOR Member C. R. “Buzz” Nixon of the PCO was a strong advocate of having systems analysis applied to the DOE. The idea was to augment economic planning assumptions with the environmental concept of feedback loops. The DOE was to have been a horizontal organization that would review the initiatives of any other department whose initiatives had any environmental impact. The DOE would then report to Cabinet, where its opinions were – in an ideal policy world- to have influence. It was hoped that, at minimum, the DOE, would have a broad mandate, and be able to convince other government departments to include environmental considerations into traditional feasibility studies.⁵⁷

⁵⁷ G. Bruce Doern, and Thomas Conway, *The Greening of Canada: Federal Institutions and Decisions*, (Toronto: University of Toronto Press, 1994), p.18.

Former Environment Minister John Roberts commented that the DOE was created as a holistic organization and that systems analysis with its inclusive and future-oriented perspectives fit with the broader DOE mandate. However, the initial years of activity tended to concentrate on more immediate concerns and on “catching-up” with existing problems. Roberts claimed that there were two distinct periods of activity for the DOE. In the initial years, efforts were concentrated on dealing with existing problems and the development of legislation and regulations to control pollution and other phenomena related to environmental degradation. He characterized this approach as relatively ineffective “band-aid solution.”⁵⁸ A second phase emerged by the mid-1970s. Concern shifted to “better understanding of complex relationships... emphasis began to be placed on anticipating problems.”⁵⁹ Holistic systems thinking became important to understand interrelationships between society, industry, technological advances, economics and the environment.

By the mid-1970s the DOE had accepted the necessity for a long-term approach to environmental policy development and for situating such policies within the context of environmental limits. That concern translated into substantial support for futures studies activities. By 1976, the DOE had established a futures-focussed Advanced Concepts Centre that with a \$50,000 per year budget. In addition the department had contracted out approximately \$660,000 worth of futures research contracts on various initiatives.⁶⁰

Canadian Association for the Club of Rome (CACOR) members such as Tom de Fayer were able to use their positions of influence within the DOE to capitalize on the

⁵⁸ John Roberts, “Managing the Environmental Challenge,” in Thomas S. Axworthy and Pierre Elliott Trudeau (editors), *Towards A Just Society: The Trudeau Years*, (Toronto: Penguin Books, 1992), pp.201-202.

⁵⁹ Roberts, “Managing the Environmental Challenge,” p.202.

⁶⁰ DOE, “Response to Questionnaire,” pp.8-10.

department's interest in futures studies.⁶¹ De Fayer's efforts lead to the DOE sponsoring a Canadian version of a report initially conducted for American President Jimmy Carter, *Global 2000* by Gerald O. Barney.⁶² The Barney report painted an ominous image of the world at the turn of the twenty-first century. It claimed that if ameliorative measures were not enacted the world in 2000 was expected to be more crowded, polluted and less stable

⁶¹ The Hungarian-born economist had completed a Master of Arts degree in England under well-known economist Lord John Maynard Keynes before working in China and becoming an advisor to both the British government and the OECD. De Fayer was eventually recruited to Canada to work for the National Energy Board (NEB) but he retained his OECD connections and became Chair of the OECD Group of Experts on the State of the Environment. From the NEB he moved to the Department of the Environment (DOE) to become a Senior Policy Advisor in the DOE's Corporate Planning Group's Policy Directorate. It was during his stay with the DOE that he developed an interest in futures studies. De Fayer first became directly involved in COR projects in 1977 when he was an advisor to the international team assembled by Ervin Laszlo for his report to the Club of Rome, *Goals for Mankind*. CACOR member W.H. C. Simmonds was also an advisor to the Laszlo project.

Rennie Whitehead invited de Fayer to join CACOR in July 1976. That offer was accepted the following month. In his acceptance letter de Fayer stated: "I feel greatly honoured by your invitation and also much appreciate the confidence that you express in the contribution that I may make to the continued success of the Association." As explained in this and the next chapter, de Fayer illustrated that Whitehead's confidence was not misplaced.

J. Rennie Whitehead, "Tom and CACOR," in Gail Stewart (editor) *Thomas L. de Fayer (1919-1999): A Tribute by Some of his Friends and Colleagues*, (Ottawa: Gail Stewart, 2004), pp.7-8.

J. Rennie Whitehead, "Foreword," in Stewart, *Thomas L. de Fayer*, p.i.

Ronald S. Ritchie, "Letter to Tom L. de Fayer, 28 May, 1981," (CACORA: File 310 CACOR Correspondence 1981), (Follow up to *Global 2000 Implications for Canada*), p.1.

Ervin Laszlo et. al., *Goals for Mankind: A Report to the Club of Rome New Horizons of Global Community*, (New York: E. P. Dutton, 1977), pp.xx – xxi.

Tom de Fayer, "Letter to J. R. Whitehead, 11 August 1976," (CACORA: File 304: CACOR Correspondence 1976), p.1.

⁶² The *Global 2000* project had its genesis in 1977 when United States President Jimmy Carter addressed Congress to tell them of plans to lay the foundations for long-term planning via a three year study by the President's Council on Environmental Quality under the direction of physicist Gerald O. Barney. It was not meant to make predictions, but to consult thirteen US government agencies and make projections of possible problems to emerge over the subsequent two decades. The report was to specifically address 'probable changes in the world's population, natural resources and environment through to the end of the century.'

Roberts, "Managing the Environmental Challenge," p.218.

Executive Office of the President, Council on Environmental Quality, "Press Release 24 July 1980," (CACORA: File 4002 *Global 2000: Implications for Canada, Draft, Press Releases*), pp.1-2.

-- "Toward a Troubled 21st Century: A Presidential Panel Finds the Global Outlook Extremely Bleak," *Time*, (4 August 1980), p.46.

W. R. Stadelman, "General Letter 23 May 1980," (CAOR Archives: File 309 "CACOR Correspondence, 1980), p.1.

-- "The Global 2000 Report to President Carter," *CACOR Newsletter*, (Number 4, 1980), (CACOR Archives: File 5018 *CACOR Newsletter*), pp.1.

than in the 1975 to 1980 era. World population would increase by a third and population growth in 2000 would likely be 40% higher than when the report was written.⁶³

While Barney was directing the *Global 2000* project in the United States, he approached CACOR with an offer to do an equivalent study with a Canadian focus. The DOE's Thomas de Fayer led efforts to accept Barney's offer by first convincing the CACOR Executive of its merits. The purpose of the *Global 2000: Implications for Canada* report was to use an outside perspective (Barney was an American) as a basis for Canadians to look ahead at the final two decades of the twentieth century.⁶⁴ While interested, the CACOR lacked sufficient funds to directly sponsor the project. CACOR Chairman at the time, William Stadelman, spearheaded efforts to locate and convince private Canadian companies to contribute to the project. Approximately forty private

⁶³ In addition, the relative gap between the developed and less developed countries of the world would increase with the added complication that four-fifths of the world's population was expected to be living in the more disadvantaged nations. There were also major natural resource and environmental concerns as the former were expected to be less available than in 1980 and the latter was expected to begin to lose some of its life-carrying capabilities. Once again the lesser-developed countries were expected to fare worse than the developed world as environmental concerns such as deforestation were expected to be worse than in the industrialised nations. Prices for vital natural resources, especially energy and food resources, were expected to increase. In general, the world at the cusp of the twenty-first century was expected to "be more vulnerable both to natural disaster and to disruptions from human causes."

The report had substantial Presidential backing and it was distributed to all embassies in Washington and a special Presidential Cabinet task force to examine its implications was to be established. President Carter's reaction was to add weight to the findings by describing them as being "of great concern to all of us." Strong political support was critical as *Global 2000* argued that the effects of developing problems were not likely to be fully evident until 2000 or later. Moreover Carter argued that if changes of approach to public policy were not enacted the world would lose opportunities to change the course of future developments and actions "to change trends [could not] be postponed without foreclosing important options." President Carter added that the report indicated "the potential for deepening global problems over the next two decades if policies and practices around the world," continued as they were currently being conducted. *Time* magazine noted that while *Global 2000*'s message was analogous to previous futures studies, such as the 1972 *Limits to Growth*, its significance lay in the fact that it was "the first time the U.S. Government had added its full voice," to the organizations and reports expressing deep concern for the future state of the world.

-- "Toward," p.46.

Gerald O. Barney, *Global 2000: Implications for Canada*, (Toronto: Pergamon Press, 1981), pp.31-32. Executive Office of the President, et. al. "Press Release 24 July, 1980," pp.1-3.

⁶⁴ Tom de Fayer, "Attachment: Tentative Report Structure: "Global 2000: Implications for Canada," to a Letter to J. Rennie Whitehead, 21 January 1981," (CACORA: File 310 CACOR Correspondence 1981), p.1.

Canadian companies were approached about making donations in the range of \$2,500 each to support the initiative. In the end seven companies responded positively.⁶⁵

With private sector support being insufficient to complete the project the CACOR had to seek public funding to supplement costs.⁶⁶ CACOR member Rennie Whitehead said de Fayer “stick-handled [the proposal] through his own department until he had ministerial approval for funding to match the contributions of industry.”⁶⁷ De Fayer believed in a traditional pragmatic Hungarian axiom warning: “Don’t run after a carriage that has no intention of giving you a ride.”⁶⁸ However within his department it was not likely that he would be ignored and as a result his chances of gaining support were high. In addition to successfully securing DOE funding de Fayer was able to secure support from the following government departments and agencies: Industry, Trade and Commerce; External Affairs; Agriculture; Canadian International Development Agency and Statistics Canada.⁶⁹ de Fayer described the process in a letter to futurist Adam Schaff who was seeking similar funding for a subsequent futures project. After receiving the support of the CACOR Board, de Fayer obtained funding support from governmental sponsors to facilitate Barney’s Canadian report being published by Pergamon Press.⁷⁰

⁶⁵ The companies were: The Alberta Gas Trunk Line Company Ltd.; Dofasco Inc.; The Royal Bank of Canada; The Seagram Co.; Thorne Riddell & Co. and Canadian Pacific Ltd. Stadelman, “General Letter,” pp.1-5.

W. R. Stadelman, “Letter to Author, 8 March 2004,” p.2.

Barney, *Global 2000*, p.xiii.

⁶⁶ T. L. de Fayer, “Invitation, circa1981,” (CACOR Archives: File 105: 7th CACOR Conference, November 1981), p.1.

⁶⁷ Whitehead, “Tom,” pp.7-8.

⁶⁸ Tom deFayer, “A New Perspective on the Global Problematique,” in Stewart, *Thomas L. de Fayer*, p.24.

⁶⁹ Tom de Fayer, “Attachment: CACOR: Seventh Annual Conference – Friday, November 13, 1981, Theme: The Global 2000 Report: Implications for Canada, to a Letter to J. Rennie Whitehead, 21 January 1981,” (CACORA: File 310 CACOR Correspondence 1981), p.1.

⁷⁰ Tom deFayer, “Letter to Adam Schaff, 6 June 1987,” (CACORA: File 5013: Report to the Club of Rome – What are we Heading For?), p.1.

While there was a great deal of interest in the *Global 2000: Implications for Canada* project, CACOR chairman, and author of the original report laying the basis for the IRPP, Ronald Ritchie wrote to de Fayer warning that if the report were to lead to “any concrete results,” there had to be follow up. He further suggested that the CACOR might be an excellent medium to use for that purpose.⁷¹ The suggestion was in line with de Fayer’s thinking and as a result three gatherings were planned dealing with the report’s release at the end of March 1981. A pre-release seminar was planned for February 1981 with a second coinciding with the report’s March release and finally the annual CACOR Conference in November was to have had as its focus the report and its implications.⁷²

Approximately 150 individuals attended the late fall conference. In addition to the sponsoring organizations mentioned above, sixteen other federal departments and agencies were invited to participate in the conference. Outside the federal government, numerous research institutes were invited to take part including the C. D. Howe Institute, the Conference Board of Canada, the Manufacturers Association, the Canadian Labour Congress and the Canadian Environmental Law Association.⁷³ The conference had the report’s author, Gerald O. Barney as the keynote speaker. Participants were asked ahead of time to sign up for one of three concurrent seminars: Energy – Problems and Prospects; Food – Canada in a Hungry World; or Economic Development – The Canadian Outlook Amidst Global Adversity.⁷⁴

Thomas de Fayer described the publication of the *Global 2000* reports as “a trigger mechanism encouraging people to look at the questions being posed. The year

⁷¹ Ritchie, “Letter to Tom,” p.1.

⁷² de Fayer, “Attachment,” pp.1-2.

⁷³ de Fayer, “Attachment,” pp.1-2.

⁷⁴ Tom de Fayer, “Letter to Members and Guests 1981,” (CACORA: File 105 CACOR Conference November 1981), p.1.

2000 [was] an arbitrary figure to draw attention to things we should be looking at.”⁷⁵

Unfortunately, for de Fayer and the individuals who worked on the projects, the publications failed to attract much attention from the general public and the media. Three years after the initial publication, Pergamon Press’ Senior Vice President W. D. Crawley informed de Fayer that the *Global 2000: Canada* book had attracted virtually no media attention and that sales of it and the previous DOE-sponsored report had “fallen to a bare trickle.”⁷⁶

Crawley’s January 1987 letter to de Fayer mentioned several factors that helped to explain a decline in influence and activity for the Club of Rome in Canada compared with the previous two decades. Crawley was at a loss as to why the Canadian books, as well as the original Barney *Global 2000* book, were not attracting attention or selling many copies. The best explanations he could think of was the timing of the releases and the fact that “immediate pressing economic problems” not the content of the reports received media scrutiny.⁷⁷ Numerous issues and crises focussed public attention on domestic issues rather than broader questions of global significance that besieged Canadians and their Prime Minister for the majority of the 1980s.⁷⁸

⁷⁵ Michael Keating, “Problem Seen For Canada With World Food Shortage,” *The Globe And Mail*, (2 December 1981), p.4.

⁷⁶ Roder D. Voyer and Mark G. Murphy, *Global 2000: Canada A View of Canadian Economic Development Prospects, Resources and the Environment*, (Toronto: Pergamon Press, 1984), pp.xi-xii.

W. D. Crawley, “Letter to Tom L. de Fayer 29 January 1987,” (CACORA: 5013 Report to the Club of Rome – What are we Heading For?), p.1.

⁷⁷ Crawley, “Letter to de Fayer,” p.1.

⁷⁸ Reflecting upon Canadian society during the early 1980s political pollster Allan Gregg wrote: “In the early 1980s, with the economy in a tailspin, an energy crisis threatening both treasuries [federal and provincial] and lifestyles, and the country politically divided over social issues, somehow the most critical matter of the day was to bring Canada’s constitution home from Britain, and to knit Canadians together as one nation, with all its citizens subject to the same rights and responsibilities.”

Historians Robert Bothwell and Jack Granatstein commented that in the late seventies and into the nineteen eighties “National unity was a government preoccupation, as Quebec separatism strengthened.” In 1978 Trudeau had written to Cabinet Minister Alastair Gillespie to explain “during this period of Canadian constitutional turmoil, Canadians should never forget that our international stature, our potential for

For example, the skyrocketing price of energy at the turn of the decade was an important factor in Joe Clark's inability to win the 1980 election. It also led to Trudeau's much-loathed National Energy Policy (NEP).⁷⁹ Meanwhile, Quebec's sovereignty movement was presenting a formidable obstacle to the future unity of the country with potentially strong sentimental and economic consequences should Canada fail to survive intact.⁸⁰

In addition to potential unity problems, Canadians were dealing with severe economic difficulties in the early 1980s. Stagflation and a deteriorating Gross Domestic Product figure from the mid-1970s onward into the 1980s did not augur well for the economic stability of the country. Economic matters were being exacerbated by a mushrooming national debt being accumulated by the federal government who, lacking a sufficient tax base, was borrowing increasing sums of money to pay for services. Deficits were being accumulated to cover the costs of governmental programs developed in more prosperous times and were not being put into capital investments. In 1975 the deficit was

effectiveness and accomplishment, and even our identity are all dependent on our ability to maintain unity. Our identity, and the essential recognition on which we depend, will be much more resilient and resistant to erosion should we continue to pursue an active, sympathetic, responsible role in the world."

Allan Gregg, "Quebec's Final Victory," *The Walrus*, (Volume 2, Issue 1, February 2005), p.51.

Robert Bothwell and J. L. Granatstein, *Our Century: The Canadian Journey*, (Toronto: McArthur & Company, 2000), p.207.

Trudeau, "Letter to Gillespie 16 February 1978," p.7.

⁷⁹ For an excellent account of the strong connection between the NEP and Western Alienation see David Kilgour's *Uneasy Patriots*, especially chapters one and five. The NEP cost Alberta alone in the area of \$60 billion in revenues and economic activity and has become a sore point in that province's and the region's relations with the rest of the country.

Bothwell, Drummond and English, *Canada Since 1945*, p.367, pp.421-423.

David Kilgour, *Uneasy Patriots: Western Canadians in Confederation*, (Edmonton: Lone Pine Publishing, 1988), pp.38-42, p.93, pp.94-99, p.102 and p.107.

⁸⁰ Bothwell, Drummond and English, *Canada Since 1945*, pp.404-407.

\$3.8 billion. By 1982, it had grown to \$20.3 billion.⁸¹ Meanwhile, by the last quarter of 1982, the seasonally adjusted unemployment rate was 12.8%⁸²

All the immediate concerns noted above distracted most Canadians from issues related to prospective thinking and the need to plan today for the well being of future generations. Thus the evidence and arguments presented in the *Global 2000* reports failed to garner support among traditional allies and were ignored by the media. For CACOR, the problem of attracting media and public attention was about to get worse.

In addition to sluggish sales, Crawley's 1987 letter to de Fayer mentioned a further problem that was emblematic of the crisis discussed next chapter that COR/CACOR faced in the 1980s. Crawley said that the COR/CACOR's main publisher, Pergamon, was restructuring and closing their Toronto office. Responsibility for social science and political publications was, as a result, being transferred to Oxford in England. He was quick to add that the move did not preclude any future collaboration between the publisher and the CACOR but it did "present some hindrances (particularly in a "political" sense)."⁸³ Crawley's comment was likely a reference to the political and intellectual landscape in the United Kingdom at the time under the leadership of Prime

⁸¹ Kenneth Norrie and Douglas Owsram, *A History of the Canadian Economy*, (Toronto: Harcourt Brace & Company, Canada, 1996), pp.437-440.

Richard Pomfret, *The Economic Development of Canada Second Edition*, (Scarborough: Nelson Canada, 1993), pp.276-279.

⁸² John Turner used the numerous problems affecting both individual Canadians and the country as a whole in June 1984 to call a snap election for September. At the press conference announcing the dissolution of parliament Turner said: "an election is necessary at this time. One million four hundred thousand Canadians are unemployed and need jobs. The pressure on our exchange rate and our interest rates gives Canadians cause for concern. The international financial situation is unsettling. Our public debt is growing too fast and we need a renewal of confidence and certainty in this country."

Joyanna Moy, "An Analysis of Unemployment and Other Labour Market Indicators in 10 Countries," *Monthly Labor Review*, (Volume 111 Issue 4, April 1988), p. 40.

John Turner, "News Conference to Call an Election, July 9, 1984," *First Among Equals: The Prime Minister in Canadian Life and Politics*, <http://www.collectionscanada.ca/primeministers/h4-4039-e.html>, (accessed 14 September 2005).

⁸³ Crawley, "Letter to de Fayer," pp.1-2.

Minister Margaret Thatcher. As discussed in the next chapter, the UK led the way in placing the idea that there could be limits to growth, or that the state should interfere with the free markets beyond the pale of journalistic, popular, political and academic discourse.

CACOR, the University of Guelph and the 5000 Days Project

While de Fayer led activities in Ottawa, in southern Ontario industrialist and CACOR member Kenneth Hammond was active in promoting new awareness and research initiatives. At the University of Guelph (UofG) the Club of Rome was an inspiration behind the eventual creation in the 1980s of the 5000 Days course. The CACOR subsequently became involved in supporting the project. Motivated by the 1972 *Limits to Growth* report, scientist Dr. Keith Ronald led the charge to have greater university level teaching on matters relating to the relationship between humanity and the natural environment.⁸⁴

The impact created by the publication of *The Limits to Growth* was evident at the University of Guelph during the May 1972 convocation, just two months after the report was first published. The Dean of the Ontario Agricultural College, Richard Norval Richards, delivered the first address of the day. In that speech, the Dean discussed the importance of the *Limits to Growth*'s message and said to the graduating students that the

⁸⁴ Ronald was a zoologist by training who was an advisor to federal Environment Ministers as well as becoming the UofG's Dean of Biological Sciences and the head of the university's Arboretum.

Kenneth Hammond Conversation with Author, March 2005. (Hereafter Hammond Interview).

Keith Ronald, Conversation with Author April 2005. (Hereafter Ronald Interview).

Donella H Meadows, Dennis L. Meadows, Jorgen Randers, and William W. Behrens III, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, (Washington: Potomac Associates, 1972).

real issue for them was to determine if humanity could control itself before it was too late.⁸⁵

Following Richards' address, Professor Ronald outlined his concerns about the state of university teaching and raised the issues that would eventually form the focus of the 5000 Days course. Taking the Dean's message one step further, Ronald was inspired by the *Limits to Growth* to criticize the isolated nature of university teaching and argued the need for universities to expand their curriculum and to focus, within a broad ecological framework, on four critical areas: population, pollution, use of finite resources, and development. It was an odd address to give to a graduating class who had just completed their university training, but it was controversial and stimulated a discussion that eventually led to the development of the UofG's first for-credit distance education course.⁸⁶

Ronald's interests were soon paired with those of the owner of the Guelph-based multinational corporation Hammond Manufacturing, Kenneth Hammond who served on the University of Guelph's Board of Governors. Hammond had similarly been "scared" and inspired by the 1972 *Limits to Growth* study to begin a further discussion on the growth controversy.⁸⁷ He first invited a set of approximately fifteen leading individuals from Guelph to his boardroom at the main Hammond Manufacturing office. Having met with some success it was decided to hold a second meeting on the topic with a few

⁸⁵ Richard Norval Richards, "University Of Guelph Convocation, Wednesday, May The Twenty-Fourth, Nineteen Hundred and Seventy-Two, Ten a.m., War Memorial Hall," (University of Guelph: Guelph McLaughlin Archives).

⁸⁶ Keith Ronald, "University of Guelph Convocation and Graduation, Friday, February the Fourth, Nineteen Hundred and Seventy-Seven, Ten a.m., War Memorial Hall," (University of Guelph: Guelph McLaughlin Archives).

Ronald Interview.

⁸⁷ Hammond Interview.

Ronald Interview.

revisions to the invitee list and as a result of the second meeting it was decided to form “The Club of Guelph” as an informal discussion group.⁸⁸

Not content with a discussion group, Hammond believed the university should have been doing more to address critical issues related to the future health of the planet and its inhabitants. He once wrote: “the best way to effect change from the destructive direction humanity is going to one of survival is through the educational and informational systems throughout the world... a difficult task and challenge indeed.”⁸⁹ It was this similarity of interest that led Hammond to provide Ronald with a \$10,000 grant to facilitate the creation of the 5000 Days project as the UofG’s first for-credit distance education course.⁹⁰

Hammond’s external funding played a critical role in allowing Ronald to develop the course without the constraints of university budgeting. Hammond’s grant was strictly directed and was not available for other use.⁹¹ In addition to Hammond’s support, Ronald found administrative support from another person who believed in new directions, Janet Wardlaw. In 1984 she became the UofG’s first female executive when she was appointed Vice-President Academic.⁹² In addition Ronald found support from the Distance Education Coordinator Marc Waldron, who had first introduced Ronald to Hammond.⁹³

⁸⁸ Hammond Interview.

⁸⁹ Kenneth W. Hammond, “Letter to J. Rennie Whitehead, 30 June 1994,” (CACORA: Meetings 1993), p.1.

⁹⁰ Ronald Interview.

Hammond Interview.

⁹¹ Hammond continues to provide financial support to the UofG with strict conditions being applied to the re-allocation of his funding.

Ronald Interview.

Hammond Interview.

⁹² Wardlaw had previously been responsible for establishing the UofG’s College of Family and Consumer Studies, formerly the Macdonald Institute for home economics. She later became the College’s first Dean, before being appointed VP Academic. She later went on to become the first female President of the International Development Research Centre (IDRC).

Ronald Interview.

As Ronald's 5000 Days ideas were inspired by the first report to the Club of Rome in 1972, Hammond suggested that CACOR should sponsor the course. He suggested that the interrelated problems of the "Problematique" be used as a focal point for the course's design.⁹⁴ Hammond and Ronald saw the 5000 Days course as a means to further a broad discussion of the Problematique. Hammond also hoped it would provide CACOR with a concrete initiative to help draw more attention and interest to the organization. However, financial difficulties meant that CACOR contributions had to be in-kind rather than monetary.

In September 1984 CACOR President Michael Kirby wrote that the CACOR stood ready to assist any way it could but it did not have the wherewithal to contribute financially to the course. In lieu of direct funding, Kirby suggested that there were individuals in the organization who had substantial experience with the Problematique who would be willing to help.⁹⁵ Rather than financial contributions then, CACOR donated a number of publications and moved its archive to the UofG's Arboretum Interpretation Centre.

To help with preparing written course materials and with instruction, Ronald recruited the assistance of Jane Dougan, Alan Watson, and Pam Healey. They were to organize, research and write the course textbook and to help with administration. Dougan had worked with Ronald as an editor and shared his concerns for the

Lori Bona Hunt, "A Woman Of Substance: Former Associate VP Receives Women Of Distinction Award For Lifetime Achievement," *Profile*, <http://www.uoguelph.ca/atguelph/99-05-19/people.html>, (accessed 9 May 2005).

⁹³ Ronald Interview.

⁹⁴ Hammond Interview.
Ronald Interview.

⁹⁵ Michael J. L. Kirby, "Letter to Herb Armstrong 26 September 1984," (CACORA: File 314 CACOR Correspondence June-Dec 1984), p.1.

environment and humanity.⁹⁶ Reflecting CACOR concerns, Dougan said that the course outline and material was developed to “weave together the Problematique... social, economic and spiritual issues together with environmental considerations.”⁹⁷ The course was finally unveiled in 1985 with an initial enrollment of 20 students. However, mainly via word-of-mouth, the course rapidly attracted the attention of UofG students and others who enrolled in increasing numbers. After six years the course was attracting hundreds of students and required the assistance of hired markers.⁹⁸

A part of the course’s appeal, beyond being a distance education course for credit, was that it was open to anyone who could work from home on the material, either for credit or out of personal interest.⁹⁹ The course has continued and has spawned the creation of a second UofG distance education course called Beyond the 5000 Days. Both courses are a part of a broader Certificate in Environmental Citizenship program offered by the university.¹⁰⁰ In addition Ronald and Dougan subsequently used and expanded upon the 5000 Days material to create a second distance education initiative at Nova Southeastern University in Fort Lauderdale Florida.¹⁰¹ Internet technology has enabled the course to become part of a global classroom with participants from all over the world at the undergraduate and graduate student levels, as well as at the guest speaker levels.

⁹⁶ Jane Dougan, Conversation with Author April 2005. (Hereafter Dougan Interview).
Ronald Interview.

⁹⁷ Jane Dougan, “Programs for Futures Education: Presentation to CACOR, 15 June 1993,” (CACORA: File 4006B CACOR/ University of Guelph), p.2.

⁹⁸ Ronald Interview.
Dougan Interview.

⁹⁹ Ronald Interview.

¹⁰⁰ University of Guelph, “XI. Special Study Opportunities: Certificates and Diplomas, Certificate in Environmental Citizenship,” in *2005-2006 University of Guelph Undergraduate Calendar*, http://www.uoguelph.ca/undergrad_calendar/c11/c11-certdip-envcit.shtml, (accessed 25 March 2005).

Ronald Interview.

¹⁰¹ Ronald Interview.

Nova Southeastern University Oceanographic Center, *Graduate Certificate in Coastal Studies*, <http://www.nova.edu/cwis/oceanography/certprog/index.html>, (accessed 22 April 2005).

Dougan says that she has taught the 5000 Days and its derivative courses around the world from Canada to the US, the United Kingdom and Zimbabwe.¹⁰²

Conclusion

In the mid-1970s Senator Lamontagne had reason to be pleased with his efforts to promote and institutionalize futures research in Canada. The Institute for Research on Public Policy (IRPP), the Ministry of State for Science and Technology (MOSST) and the Canadian Association for Future Studies (CAFS) had been created and were actively involved in the futures field. Lamontagne commented that although there had been significant delays the country had “made significant progress toward the building of a coordinated national network of futures research as envisaged by our Senate Committee since 1972.” He added that with the three key components, the IRPP, MOSST and CAFS, in operation, the futures “network now [had] all the basic institutions and links to operate properly.”¹⁰³

The IRPP’s interest in futures studies had been foisted on the organization through a combination of factors with the Senate Special Committee’s recommendations on the need for greater futures studies being critical. In addition there was a growing impatience on the part of Prime Minister Pierre Trudeau, members of his Cabinet and the broader House of Commons, about the IRPP’s seemingly perpetual problems in becoming an active research organization. Those two factors came together in the Privy Council Office (PCO). The PCO decided to use futures studies as a means of providing a research focus for the nascent IRPP. Futures studies were to provide the IRPP with a

¹⁰² Dougan Interview.

¹⁰³ Lamontagne, “Notes for an Address,” p.7.

sense of purpose and direction and additional funding through PCO-granted research contracts.

Meanwhile, MOSST had been a direct result of the Lamontagne Committee recommendations and its futures activities continued to be influenced by the Senate Committee's report and follow-up activities. Other key federal agencies, such as Treasury Board, acknowledged the importance of Lamontagne's efforts to promote futures activities within federal policy-making circles. The Treasury Board's Deputy Secretary T. E. Reid commented: "there had been a casual relationship between the sending of [the Senate's] questionnaire in October 1975 and the creation the following December of the Coordinating Committee on Evaluation and Planning." In addition, an Interdepartmental Committee on Futures Research was established within the federal government with the assistance of MOSST's Secretariat for Futures Studies.¹⁰⁴

While the CAFS was an indirect outcome from the Lamontagne Committee Report, its creation was greatly assisted by the Canadian Senate, the IRPP and MOSST. Moreover in the mid-1970s, futures activities appeared to be on a major upswing. Under Michael Kirby's direction, the IRPP including its dedicated Futures Section quickly began publishing at a feverish pace and holding seminars and conferences. MOSST was heavily involved in supporting various futures activities, both of its own initiatives and working with other futures-minded groups. The CAFS was rapidly increasing in size and in terms of membership, publication activities and the size of its conferences. Likewise, the University of Guelph's 5000 Days course, and the subsequent Beyond 5000 Days attracted substantial public and academic attention.

¹⁰⁴ Lamontagne, "Notes for an Address," p.6.

In addition to federal activities, the creation and spreading popularity of the CAFS and the 5000 Days course gave reason for optimism for futures studies advocates. While it was not to last, Senator Lamontagne had a right to feel that he had attained success in popularizing and institutionalizing systems analysis and futures studies as integral parts of the Canadian public policy making process. The next chapters explore why things fell apart for systems analysis advocates in general and for the Club of Rome and its Canadian Association more specifically. The loss of contacts in the publishing world mentioned above was a relatively minor setback compared to the larger issues discussed next that threatened the viability of both the COR and CACOR.

Chapter 6: The Decline of COR/CACOR Influence in Canada 1979-1988

While the previous two chapters discussed the fruits of the influence of the Club of Rome (COR) and the Canadian Association for the Club of Rome (CACOR) in Canada, this chapter examines the circumstances that led to COR/CACOR's decline in influence in Canada and beyond. An intellectual paradigm shift regarding approaches to public policy development and the loss of key idea patrons and practitioners from the ranks of the civil service were the primary factors complicating COR/CACOR activities in Canada in the 1980s and beyond. Such problems were exacerbated by the untimely death of COR co-founder Aurelio Peccei, and a corresponding loss of momentum in COR/CACOR activities in the 1980s. A combination of the numerous factors discussed in this chapter imperilled, at least in Canada, COR/CACOR's future existence because the organization ceased to be an influential presence in the corridors of power.

From Keynesianism to Monetarism

For advocates of holistic long-range systems approaches to policy development such as the COR/CACOR, Prime Minister Trudeau and his key aide Michael Pitfield, the 1970s and early 1980s witnessed the emergence of disturbing political trends that presaged a paradigm shift in the approach to public policy development. The international economic crisis of the 1970s caused widespread political and economic turmoil. One of the consequences of economic difficulties was a questioning of the assumptions that had guided policy development since the Second World War. Political scientist Isabella Bakker observed that the 1970s saw the emergence of a major debate between Keynesians, who believed in a strong role for the state, and the monetarists who

refuted traditional Keynesian ideas about a positive role for the state in the life and economy of a nation.¹

There is much debate within academia concerning the extent to which Canada did, or did not, implement practical Keynesian economic theory during the middle decades of the twentieth century.² However, it is evident that during Trudeau's government, that the Prime Minister, his cabinet and civil service broadly accepted the idea fundamental to Keynesian philosophy: the state had an active and positive role to play in the operation of the market economy and in ameliorating its negative consequences. It was a line of reasoning that led Prime Minister Trudeau at Christmas 1975 to comment on the failure of the capitalist system and the potential need for lasting government intervention.³ The Prime Minister's comments were largely met with scorn by the business community and led to a loss of support for the Liberal Party from the business sector. The *Globe & Mail* commented, "So loud was the outcry, even from

¹ Isabella Bakker, "The Politics of Scarcity: Deficits and the Debt," in Michael S. Whittington and Glen Williams (editors), *Canadian Politics in the 1990s: Fourth Edition*, (Toronto: Nelson Canada, 1995), pp.55-56.

² Canadian political scientists Robert Campbell and Philip Resnick argue that Canada never actively embraced Keynesian philosophy. Campbell argued that since the end of the Second World War, Canada had practiced "a kind of policy schizophrenia," and that by the mid-1980s the country was in a post-Keynesian era. His argument was that Canada had never fully embraced the full Keynesian model, but had implemented pseudo-Keynesian ideas that ultimately failed to produce the desired results. Similarly Resnick argued that the expansion of the Canadian state in the 1960s in the midst of an economic boom was antithetical to Keynesian ideas about government spending that would have dictated budgetary surpluses and "state retrenchment". Nonetheless, the decade of the 1970s seemed to indicate that traditional approaches to government involvement in the economy were no longer working.

Robert Malcolm Campbell, *Grand Illusions: The Politics of the Keynesian Experience in Canada 1945 – 1975*, (Peterborough: Broadview Press, 1987), pp.5-7, pp.166-168 and pp.184-189.

Philip Resnick, *The Masks of Proteus: Canadian Reflections on the State*, (Montreal: McGill-Queen's University Press, 1990), p.65.

³ Hugh Windsor, "Gillespie to Meet Businessmen: Concern Over PM's Views Prompts Toronto Meeting," *Globe & Mail*, (9 January 1976), p.1.

-- "Ottawa Believes in Free Enterprise, Lang Insists," *Globe & Mail*, (9 January 1976), p.1.

Robert Trumbull, "Canadian Prime Minister Trudeau's Call for a New Society," *New York Times*, (11 January 1976) p.8.

Edward Cowan, "Inflation, Wage-Price Controls, Public-Service Strikes and Remarks by Prime Minister Spark Debate About Future of 'Free Enterprise System,'" *New York Times*, (19 January 1976) p.1.

within his own caucus that Mr. Trudeau recanted and never again seriously questioned the free market.”⁴

However, Trudeau’s subsequent meeting with US Ambassador Thomas Enders clearly indicated that, at least in private, he continued to believe in the necessity of governmental interference in the operation of the free market economy. During an August 1976 visit, the Prime Minister stated:

the great inflation and the ‘great wastefulness’⁵ of the seventies shows that something is fundamentally wrong... the market system intended to mediate greed for social benefit, is instead being dominated by it... a new social contract is needed. Canada’s wage and price controls are the first step in an integrative process intended to establish it. The second step would be the post-controls business/labor/government structure.⁶

The Prime Minister’s conversation with Enders reflected both the tone of policy development in his government and his belief that the state needed to play a positive role in controlling the excesses of the operations of the free market system and its greatest vice – greed. Trudeau’s comment was made at a moment when Keynesian ideas related to the potentially positive role of the state in economic affairs were not yet passé.

Enders commented that Trudeau remained committed to a long-term solution, even though a shorter-term proposal would have been easier to sell to sceptical labour unions, the business community, and the electorate. Enders further added that the Prime

⁴ Jeffrey Simpson, John Gray and Donn Downey, “An Unconventional Man A Conventional PM,” *Globe & Mail*, 29 September 2000, <http://www.theglobeandmail.com/series/trudeau/obit.html>, (accessed 19 September 2005).

⁵ The idea of the existence and impact of a “wasteful” western society was further explored, with financial backing from Canada, in Dennis Gabor and others’ report to the Club of Rome in 1978 *Beyond the Age of Waste*.

Aurelio Peccei, “Preface,” in D. Gabor and U. Colombo, with A. King and R. Galli, *Beyond the Age of Waste: A Report to the Club of Rome, Second Edition*, (Oxford: Pergamon Press, 1981), p.ix.

J. Rennis Whitehead, “Memorandum to Dr. Maurice LeClair, 20 December 1974,” (CACOR Archives: File 301 CACOR Correspondence 1974), p.1.

⁶ Thomas Enders, “Department of State Telegram, Subject: Conversation with Trudeau August 1976,” (Gerald R. Ford Library: L. William Seidman, Assistant To The President For Economic Affairs; Executive Director, Economic Policy Board: Files, 1974-77: Box 224 File 7660247 - Ambassador Enders), p.2.

Minister was “convinced of his vision but [was] trying to govern by fiat rather than [using] his very considerable skills as a practical politician.”⁷ Trudeau attempted to govern based on principles first and electoral/political considerations second.

Regardless of the views of Canada’s Prime Minister, as the 1980s approached, the winds of intellectual change on the international front were shifting the political spectrum to the right. The early 1980s, according to academic Isabella Bakker were “a decade of uncertainty for state policy-makers.”⁸ A 1980 Canadian Institute for Economic Policy report exclaimed that the international system in the West that had evolved and become dominant since the end of the Second World War was “de-stabilizing, with all the problems, challenges and opportunities arising from that process.”⁹ Commentators Philip DeMont and J. Eugene Lang explained that the economic crises of the 1970s and early 1980s “killed” Keynesianism as it was developed to fight deflationary pressures, not inflationary ones. As a result when governments “turned to the Keynes tool box... they found to their consternation that it was empty.”¹⁰

British commentator David Marquand said that followers of Keynesian thinking often remained in positions of power, but “the intellectual system on which they based their claim to power was patently crumbling.”¹¹ Political scientist Peter Aucoin concurred and added that it was a problem faced by all Western nations who were forced to develop new strategies for the future. He further commented that in the late 1970s, Britain stood out due to the eagerness of its Prime Minister to tackle existing economic and policy

⁷ Enders, “Department”, p.2, p.4.

⁸ Bakker, “The Politics,” p.57.

⁹ John J. Shepard, *The Transition to Reality: Directions for Canadian Industrial Strategy*, (Ottawa: Canadian Institute for Economic Policy, 1980), pp.1-2.

¹⁰ Philip DeMont and J. Eugene Lang, *Turning Point: Moving Beyond Neoconservatism*, (Toronto: Stoddart Publishing Co. Limited, 1999), pp.94-95.

¹¹ David Marquand, “Moralists and Hedonists,” in David Marquand and Anthony Seldon (editors), *The Ideas that Shaped Post-War Britain*, (Hammersmith: Fontana Press, 1996), p.8.

problems.¹² In Canada and in the UK, Keynesian thinking “ended in the realm of ideas well before corresponding changes took place in the realm of governmental power.”¹³

In the United Kingdom, Margaret Thatcher – elected Prime Minister in 1979 – believed that the economic crises of the mid-1970s had placed Britain “on a knife edge” and that her radical economic and moral program of government was “required by the practical circumstances of the time.”¹⁴ For Thatcher, the basic problem facing the UK was that the state that was too involved in the economic and social life of the nation.¹⁵ Meanwhile, across the ocean in the same year as Thatcher became the British leader, future US President Ronald Reagan commented in an address called Telescope I: “the miracle of the free market place is all around us. It makes you wonder why we don’t have more faith in it.”¹⁶ He later postulated that America’s inflation problem could be solved if only the government “would lift some of the paper burden from the back of [the US] industrial system.”¹⁷

Former Trudeau Cabinet Minister John Roberts said of the 1980s that it was the start of an ongoing period of disillusionment for small “I” liberals around the world. A period of “social frustration and economic confusion” caused basic liberal political ideals to become “contested on all sides”.¹⁸ The same phenomenon that was wreaking havoc on

¹² Peter Aucoin, *The New Public Management: Canada In Comparative Perspective*, (Montreal: Institute for Research on Public Policy, 1995), p.1.

¹³ Marquand, “Moralists,” p.8.

¹⁴ Margaret Thatcher, “Reflections of Liberty,” in Stanislao Pugliese (editor) *The Political Legacy of Margaret Thatcher*, (London: Politico’s Publishing, 2003), pp.4-6.

¹⁵ Thatcher, “Reflections,” pp.3-7.

¹⁶ Ronald Reagan, “Telescope I,” in Kiron K. Skinner, Annelise Anderson and Martin Anderson (editors), *Reagan in His Own Hand: The Writings of Ronald Reagan that Reveal His Revolutionary Vision for America*, (New York: Touchstone, 2001), p.310.

¹⁷ Ronald Reagan, “Inflation, 8 January 1975,” in Skinner et al. *Reagan*, p.256.

¹⁸ Roberts claimed that the seemingly intractable stagflation problem was the result of both the 1973 OPEC crisis and the large national deficits in the United States caused by Lyndon Johnson’s spending on the Vietnam War and on social programs associated with his ‘Great Society’ initiative. Irrespective of its cause,

liberal-minded individuals and organizations around the world also sounded the death knell for the Club of Rome and its Canadian Association's influence in Canada and undermined its core message of the need for long-term holistic planning and to control the forces of economic growth. Academic David Marquand marvelled at how the new monetarist "paradigm shaped the political agenda and controlled the intellectual weather."¹⁹

The solution to economic problems proposed by followers of Thatcher and Reagan was termed monetarism. It was antithetical to Keynesian ideas about a positive role for the state in economic and social affairs. Believers in monetarist doctrine, alternatively referred to in secondary literature as the New Right, or neo-conservative doctrines, placed an "emphasis on market freedom, social and monetary discipline and a tightly concentrated state."²⁰ Monetarists believed that government intervention in economic affairs was counterproductive as markets operated best free of governmental interference.²¹ A strong economy tended to be integrally linked to a nation's health and the well being of its citizens. Therefore, it was not much of a leap in logic to have concluded that policy-makers should adhere to the dictates of the free market.

the Keynesian approach was not able to deal with the stagflation problem and, Roberts added, that the idea of "fine tuning" the economy at the macroeconomic level proved extremely difficult.

John Roberts, "Liberalism: The Return of the Perennial Philosophy," in Howard Aster and Thomas S. Axworthy (editors) *Searching for the New Liberalism: Perspectives, Policies Prospects*, (Oakville: Mosaic Press, 2003), pp.15-16, p.18.

¹⁹ Marquand, "Moralists," p.8.

²⁰ Marquand, "Moralists," p.8.

²¹ -- "Monetarism," in Alan Bullock, Oliver Stallybrass, Stephen Trombley and Bruce Eadie, (editors) *The Fontana Dictionary of Modern Thought*, (London: Fontana Press, 1990), p.543.

The End of the Trudeau Era

As long as Trudeau was Prime Minister, the likelihood of Canadian public policy becoming subservient to market-based pressures was slight. However in the final years of his time in power, the commitment to systems-based holistic policy development waned. As discussed in chapter three, Michael Pitfield and Pierre Trudeau were political functionalists who believed in using systems analysis and imbuing the policy making process with a holistic long-range perspective. Journalist Christina McCall-Newman wrote that Pitfield did not invent a new bureaucratic system on his own and that “it would have never been put in place without Pierre Trudeau’s fascination with cybernetics and in the efficacy of planning.”²² Having firmly established himself at the pinnacle of the Canadian civil service during his first tenure atop the PCO from 1975 to 1979, Pitfield returned from teaching at Harvard to once again command the most influential civil service position within the federal government, Clerk of the PCO.²³

Unlike his controversial appointment ahead of senior bureaucrats in 1975, he now had a firm grip on the civil service. The battle to entrench a systems approach to public policy development was largely won. There was still work to be done in that regard, but on the whole, a modern approach to policy development supplanted the largely *ad hoc* individualistic policy development that had endured in Canada from Confederation until the end of the Lester B. Pearson era.²⁴

However, by the 1980s, the national media and numerous cabinet members were growing wary of both Pitfield’s influence on the Prime Minister and on the use of

²² Christina McCall-Newman, *Grits: An Intimate Portrait of the Liberal Party*, (Toronto: Macmillan of Canada, 1982, p.22.

²³ --- “The Second,” p.4.

²⁴ Michael Pitfield, “The Shape of Government in the 1980s: Techniques and Instruments for Policy Formulation at the Federal Level,” *Canadian Public Administration*, (Volume 19 No.1, 1976), pp.15-20.

systems research in the public policy making process. In July 1980, the *Globe & Mail*'s Wayne Cheveldayoff wrote a blistering attack that illustrated both the security of Pitfield's position within the PCO and the resentment it caused amongst some contemporaries. Cheveldayoff described Pitfield's influence as "pervasive" and suggested that his fifteen-year-plus friendship with Trudeau meant that he "could well have [had] more influence on affairs of state...than any elected federal politician other than the Prime Minister."²⁵ Cheveldayoff further went on to condemn Pitfield's use of "technocratic, "systems" approach to problems" that was being applied to constitutional negotiations with the provinces.²⁶

Cabinet Ministers such as Donald Johnston, Eugene Whelan and Mark MacGuigan shared Cheveldayoff's criticisms. Johnston lamented: "The combined power of the PMO and Privy Council Office (PCO) had grown far beyond anything reasonable in a parliamentary democracy." Specifically he went on to target the Clerk of the PCO: "The PCO headed by Michael Pitfield, speaking with the authority of the Prime Minister, did not hesitate to interfere with ministerial authority."²⁷ Cabinet members Eugene Whelan and Mark MacGuigan were left questioning the pertinence of Cabinet meetings. In his memoirs, Whelan stated that he "thought most Cabinet meetings were pretty much a waste of time."²⁸ Similarly, MacGuigan said that he was "not sure how much cabinet decisions really mattered." He added that "the matters discussed had been, or would be, settled by the PM and a small group."²⁹

²⁵ Cheveldayoff, "Friendship," p.1.

²⁶ Cheveldayoff, "Friendship," p.1.

²⁷ Johnston, *Up the Hill*, p.69.

²⁸ Eugene Whelan with Rick Archbold, *Whelan*, (Toronto: Irwin Publishing, 1986), p.198.

²⁹ Mark MacGuigan, (P. Whitney Lackenbauer editor), *An Inside Look at External Affairs During the Trudeau Years*, (Calgary: University of Calgary Press, 2002), p.7.

As if oblivious to criticisms, Pitfield continued to believe that the greatest contributions to be made by members of the civil service (or bureaucrats) were “to think things through,” challenge established ideas and to examine potential implications of policy decisions within a broad based framework. Pitfield believed that if a bureaucrat were to provide a single bit of advice to his minister it had: “to be grounded in knowledge and careful consideration.”³⁰ Trudeau and Pitfield’s attitudes dovetailed with a systems approach to policy that was advocated by the Club of Rome. However, the use of systems research as a policy tool was the subject of scorn within the bureaucracy and numerous anonymous bureaucrats interviewed by Christina McCall-Newman for her book *Grits* commented that while Pitfield and Trudeau were sincere in their efforts to improve public policy development the systems approach was “a model that belonged in a university, not in the real world... it was completely rational but deeply impractical.”³¹

At the approximate mid-way point of Trudeau’s final term in office, the media began to speculate about the end of the Trudeau era and focussed on Michael Pitfield as a key indicator of the Prime Minister’s intentions. The belief was that if Pitfield left the civil service, Trudeau would not be far behind in terms of leaving public life.³² Pitfield formally left the PCO in December 1982 and in March, 1984, Trudeau appointed him to the Senate. It was the end of an era within the federal bureaucracy. With Pitfield’s and Trudeau’s departure in 1984, the zenith of systems ideas as applied to public policy had also passed.

³⁰ Mel Cappe, “Canada’s Unique Presence in North America: Why Better Than Ever Is Not Good Enough, Opening Plenary, Canada@theworld.ca, 30 November 2000,” *PCO Clerk’s Speeches and Messages*, http://www.pco.gc.ca/default.asp?Language=E&Page=clerksspeechesmessages&Sub=clerksspeeches&Doc=2000_canadaworld_e.htm, (accessed 14 September 2005).

³¹ McCall-Newman, *Grits*, pp.212-213.

³² Cheveldayoff, “Friendship,” p.1.

Without systems champions at the apex of the Canadian public policy development structures, interest in holistic long-range policy development quickly waned. As the COR and CACOR influence at the highest levels was integrally linked to an active interest in systems analysis, its influence also quickly dissipated. A change in attitude was evident almost immediately when John Turner won the subsequent Liberal leadership convention and was sworn in as Canada's seventeenth Prime Minister in June 1984.

John Turner and the New Approach to Policy

The distancing of Turner from the policies and approach of his predecessor was both deliberate and enthusiastic. Long-time Liberal strategist Keith Davey stated that the day after winning the Prime Ministership, Turner and his close advisors such as Bill Lee and John Payne, were "anxious to distance John Turner from everything and anything which smacked of Trudeau."³³ Similarly, interviews conducted by journalist Christina McCall (formerly McCall-Newman) and political scientist Stephen Clarkson led them to conclude that Turner's long time supporters had personally held Trudeau and his advisors responsible for all the ills that had occurred in Canada during their sixteen-year reign. Clarkson added that a vindictive attitude emerged soon after Turner's victory and "it was impossible for [Turner's advisors] to believe that anything the Trudeauites had wrought was worth preserving."³⁴

³³ Keith Davey, *The Rainmaker: A Passion for Politics*, (Toronto: Stoddart Publishing Co. Limited, 1986), p.332.

³⁴ Christina McCall and Stephen Clarkson, *Trudeau and Our Times: Volume 2: The Heroic Delusion*, (Toronto: McClelland & Stewart Inc., 1994), p.415.

Journalist Greg Weston further argued that Turner's team had a profound level of "paranoia and disdain for the Trudeaucrats" in the central institutions.³⁵ Trudeau's "backroom boys" had to go. As a result there was a major purging of officials. Authors Clarkson and McCall go into further detail and argue that the PMO and PCO were targeted for purging and Turner's advisors "took out their rage at Pitfield's governmental system."³⁶ Journalist James Rusk of *The Globe & Mail* argued that Turner's "first act as Prime Minister was to begin the dismantling of the complicated bureaucratic structure Pierre Trudeau and Michael Pitfield erected to run the Government of Canada."³⁷ At his first press conference, Turner went to great lengths to emphasize that he was going to transform the policy making process to make it more efficient. Turner considered the existing system 'too elaborate, too complex, too slow and too expensive.'³⁸

When asked about the key differences in the operation of the Trudeau and Turner cabinets, veteran Cabinet Minister Herb Gray said that Turner's cabinet was far more "simplified" as there were far fewer committees and meetings. He added that it made the policy process more flexible and able to respond to issues more quickly.³⁹ Turner reduced the number of cabinet committees from thirteen to ten. As well, the cabinet was reduced from thirty-seven to twenty-nine ministers and the Ministry of State for Regional

³⁵ Weston, *Reign of Error*, pp.72-73.

³⁶ McCall and Clarkson, *Trudeau*, p.416.

Weston, *Reign of Error*, pp.72-73.

³⁷ Rusk, "Trudeau-Pitfield," p.A5.

³⁸ The problem of increasing costs of government was not a new problem, nor was it a Canadian phenomena. In a 1976 address, future American President Ronald Reagan said that over the previous twenty years corporate profits had increased by 105% and wages by 213% but that government costs had soared by 340%.

Rusk, "Trudeau-Pitfield," p.A5.

Donald J. Savoie, *Governing from the Centre: The Concentration of Power in Canadian Politics*, (Toronto: University of Toronto Press, 1999), pp.40-41.

Ronald Reagan, "Government Cost II," in Kiron K. Skinner, Annelise Anderson and Martin Anderson (editors), *Reagan in His Own Hand: The Writings of Ronald Reagan that Reveal His Revolutionary Vision for America*, (New York: Touchstone, 2001), p.271.

³⁹ Gray, "Conversation".

Economic Development and the Ministry of State for Social Development were disbanded. In addition, the parallel bureaucratic structure that mirrored the cabinet system was eliminated.⁴⁰

Liberal strategist Keith Davey commented in his memoirs that Turner's "determined attempt to discredit Pierre Trudeau, all of his actions, and most of his friends... was terrible politics."⁴¹ Turner's unofficial biographer Greg Weston agreed with Davey's sentiments and speculated that the purging of "Trudeaucrats" was a major contributing factor to Turner's subsequent election problems.⁴² At the June 1984 news conference announcing the election call, Turner remarked that "the people of Canada want and should have a choice and an opportunity to clear the air."⁴³ Unfortunately for Turner, the electorate felt that the best way to fully "clear the air" was to dismiss the Liberal government completely and to elect the Progressive Conservative alternative.⁴⁴

⁴⁰ James Rusk, "Trudeau-Pitfield Era of Bureaucracy Faces Overhaul," *The Globe & Mail*, (2 July 1984), p.A5.

Savoie, *Governing*, p.41.

McCall and Clarkson, *Trudeau*, p.416.

Colin Campbell, *Executive Leadership in Canada*, (Washington: The Association for Canadian Studies in the United States, 1989), pp.15-18.

Clark, "Recent Changes," p.201.

⁴¹ Davey, *The Rainmaker*, p.340.

⁴² Weston, *Reign of Error*, p.73.

⁴³ Turner, "News Conference".

⁴⁴ A further problem for Turner was an impression by the media, public and within his own party that there was little to differentiate Turner from his main opponent Brian Mulroney. Journalist Marci McDonald has argued that similarities between the political ideologies of Turner and Mulroney left the Americans with "a embarrassment of choices". Both men were viewed as desirable by the American administration. McDonald added that for Mulroney, "Turner represented a rival for Washington's affections."

Within the Liberal caucus there were also concerns expressed that their leader was too similar to the Opposition leader. Former Cabinet Minister Eugene Whelan exclaimed to fellow Liberal caucus member Jean Chrétien, 'Turner is a carbon copy of Mulroney.' Whelan's antipathy towards Turner was well known within the Liberal ranks as during the leadership campaign to replace Trudeau, he warned party members that given the choice 'between a real Tory and a pretend Tory, they'll choose the real Tory every time.' During the subsequent 1984 election, NDP leader Ed Broadbent adopted Whelan's sentiments and used them as a main election strategy. During the campaign he regularly attacked the other two leaders whom he collectively referred to as 'the Bobbsey twins of Bay Street.'

Charlotte Montgomery, "Turner Launches Campaign to Sell 'New Era' to Voters," *The Globe & Mail*, (2 July 1984), p.A5.

Out of the Loop: CACOR Post-Trudeau

While only Prime Minister for a few months the changes made by John Turner did not bode well for an organization that advocated long-range thinking, the use of systems analysis, and argued for the ability and necessity of governments helping to shape the future and to regulate the forces of economic growth. Long-time federal environmental advisor Keith Ronald's impression was that the Club of Rome's (COR) greatest time of strength in Canada coincided with Prime Minister Pierre Trudeau's time in office and that once Trudeau left the halls of power, the COR and its Canadian Association (CACOR) relative presence dissipated.⁴⁵ However it was not just at the apex of power that COR/CACOR lost key contacts.

The positioning of the COR/CACOR officials that led the symbiotic relationship emerging between the federal government and the COR/CACOR has been discussed in previous chapters. The special relationship was most evident within, but not limited to, the Ministry of State for Science and Technology (MOSST). The full extent of COR/CACOR presence within the upper reaches of the federal public policy development in the mid-1970s was revealed to American COR-advocates Donald Lesh and Berrin Moore. In 1975-1976 Lesh and Moore looked to Canada as they developed plans to establish a United States Association for the Club of Rome (USACOR). They conducted extensive interviews and examined the CACOR membership lists to get an impression of the types of individuals to recruit for their prospective organization.

Marci McDonald, *Yankee Doodle Dandy: Brian Mulroney and the American Agenda*, (Toronto: Stoddart Publishing CO. Limited, 1986), p.46, p.75.

Jean Chrétien, *Straight From the Heart*, (Toronto: Key Porter Books Limited, 1994), p.212.

Whelan, with Archbold, *Whelan*, p.288.

Judy Steed, *Ed Broadbent: The Pursuit of Power*, (Markham: Viking, 1988), p.286, pp.292-293.

⁴⁵ Keith Ronald, Conversation with Author, April 2005. (Hereafter Ronald Interview)

The 1975 CACOR membership list that the Americans based their assessment upon contained numerous influential individuals from a variety of sectors. Key civil servants and senators from the federal government were active members. The list included: Marshall Crowe, National Energy Board Chairman; James D. Fleck, Secretary to Cabinet; Ivan Head from the Prime Minister's Office; Senator Henry Hicks; Senator Maurice Lamontagne; G. R. Lindsay, Chief of the Department of Defence's Defence Research Analysis Establishment; Jorge Miedzinski, Science Advisor for the Science Council of Canada, C. R. Nixon from the Privy Council Office; Michael Pitfield who was a personal aide to Prime Minister Trudeau; Ronald Ritchie, advisor to the government; Clive Simmonds from the Industrial Programs Office of the National Research Council; Lister Sinclair, Vice-President of the Canadian Broadcasting Corporation; Otto Thur, the Assistant Deputy Minister of Economic Plans within the Department of Finance; and J. Rennie Whitehead who was Assistant Secretary for MOSST. Former Canadian Governor General Roland Michener was also a member.⁴⁶

CACOR also had strong representation from Canada's research foundations. For example, as discussed in chapter one, C. D. Howe Institute President Robert Fowler played a critical role in the establishment of the CACOR and used C.D. Howe Institute resources in helping to establish the nascent organization; he also modeled CACOR's legal framework upon the Institute's. As well the President of the Pulp and Paper Research Institute, Pierre Gendron, the then Director of Dalhousie University's Government Studies Programme, Michael Kirby, and the President of the Ontario Research Foundation, W. R. Stadelman, all went on to play major roles within the CACOR. In addition, André Raynauld, President of the Economic Council of Canada

⁴⁶ Harris and Moore, "Feasibility Study - Appendix "Membership as of March 26, 1975," pp.1-5.

was also a member as was J. Tuzo Wilson, the Director General of the Ontario Science Centre.⁴⁷

In addition to government and research centre circles, high-ranking academics and “captains of industry,” involved themselves in the CACOR. Included in the list of members were either the heads, and/or members of senior administration of McGill University, Queen’s University, Mount Allison University, Dalhousie University, the University of Saskatchewan, York University, the University of Toronto and the University of Guelph. The private sector was also well represented within the CACOR ranks. The Chairmen of the Board for The Steel Company of Canada Limited, Canadian Industries Limited and Polysar Limited were CACOR members. As well the Vice-President of the International Nickel Company of Canada was an active member. Senior representatives from Arthur D. Little of Canada Limited, Kodak Canada, Mitchell, Plummer and Company, and the firm of Herridge, Tolmie, Gray, Coyne and Blair also filled the ranks of the CACOR.⁴⁸

Lesh deduced from CACOR’s experience that the first priority for founding a USACOR was “the selection of outstanding members” who would be well connected at “research centers, corporations, universities, voluntary organizations and government offices.”⁴⁹ Connected individuals had the ability to produce “a far more effective action program than the board of directors could [have shaped] alone. He added that it would also mean “less of a requirement to seek foundational support for new projects.”⁵⁰

⁴⁷ Harris and Moore, “Feasibility Study - Appendix “Membership as of March 26, 1975,” pp.1-5.

⁴⁸ Harris and Moore, “Feasibility Study - Appendix “Membership as of March 26, 1975,” pp.1-5.

⁴⁹ Lesh, “Memorandum” p.2.

⁵⁰ Lesh, “Memorandum,”p.2.

The USACOR's *Feasibility Study* concluded that it was critical to have members in positions of influence within governmental and other policy development bodies ranging from academic institutions to industry and think tanks. Study authors John Harris and Berrien Moore deduced that the importance of having a well-connected CACOR membership was twofold. Having members on the inside of influential organizations guaranteed a "receptive audience" for CACOR ideas and played a critical role in securing support for both CACOR and COR initiatives. The report further put forth the idea that that the choice of initial members was critical to CACOR being able to operate in a relatively inexpensive "low-key" manner while pursuing their goals of promoting COR ideas and catalyzing support for research initiatives.⁵¹

By the time Trudeau left office in June 1984, many prominent members were missing from the 1975 list. The toll was especially high within the ranks of the federal civil service. Marshall Crowe left the National Energy Board in 1977 and the next year established his own consulting agency. He also refrained from serious involvement in CACOR activities.⁵² Meanwhile James D. Fleck moved from being the Secretary to Cabinet in 1975 to become the Deputy Minister of Industry and Tourism. In 1978 he left the federal civil service to become the William Lyon Mackenzie King Visiting Professor at Harvard University.⁵³

In addition, Trudeau advisors and kindred spirits Michael Pitfield, Michael Kirby and Ivan Head had by 1984 either taken up Senate positions or were heavily involved in

⁵¹ Harris and Moore, "Feasibility Study," p.14.

⁵² -- "Crowe, Marshall Alexander," in Elizabeth Lumley (editor), *Canadian Who's Who 2003 Volume XXXVIII*, (Toronto: University of Toronto Press, 2003), p.303.

Marshall A. Crowe, "Correspondence with Author 16 February 2003".

⁵³ Before entering the civil service Fleck had previously taught at the Keio School of Business in Japan, the University of Western Ontario School of Business and the European Institute of Business Administration in France.

-- "Fleck, James Douglas," in Lumley, *Canadian Who's Who 2003*, p.441.

activities outside the civil service. They, along with Senator Henry Hicks, had also fallen out of close contact with the CACOR and were not as involved in club activities.⁵⁴ The influential members continued to dwindle. Senator Maurice Lamontagne died in June 1983.⁵⁵ In the mid-1980s, Thomas de Fayer, born 1919, began to experience ill health.⁵⁶ Unfortunately for CACOR, as pivotal contacts diminished influential new contacts were not established. And in addition to challenges imposed by external circumstances, COR/CACOR faced substantial internal challenges.

Impact of Aurelio Peccei's Death

The impact of the loss of any of the contacts listed above paled in comparison to the death of Aurelio Peccei in March 1984. Peccei was a passionate man driven by a desire to use his privileged position to make a positive change in the world and to motivate others to join him in his cause. COR member and *Globe & Mail* publisher Roy Megarry said that he often spoke to Peccei and warned him to slow down a bit and to relax his hectic schedule as it had the potential to be detrimental to his health. Peccei appreciated the concern but ignored the advice and worked incessantly.⁵⁷ Just twelve

⁵⁴ -- "Pitfield, Hon. Peter Michael," in Lumley, *Canadian Who's Who 2003*, pp.1087-1088.

-- "Kirby, Hon. Michael J. L.," in Lumley, *Canadian Who's Who 2003*, p.723.

-- "Head Ivan Leigh," in Lumley, *Canadian Who's Who 2003*, p.596.

Head Interview.

⁵⁵ Senate of Canada, "Lamontagne, The Hon. Maurice," *Senators and Members Historical Information*, <http://www.parl.gc.ca/information/about/people/key/bio.asp?lang=E&query=1228&s=M>, (accessed 5 February 2005).

⁵⁶ Rennie Whitehead, "Tom and CACOR," in Gail Stewart (editor), *Thomas L. de Fayer: A Tribute by Some of Friends and Colleagues*, (Ottawa: Gail Stewart, 2004), p.8

⁵⁷ Roy Megarry, Conversation with Author, May 2004. (Hereafter Megarry Interview).

hours before he died, Peccei dictated to his secretary what would be his last missive: “The Club of Rome: Agenda for the End of the Century”.⁵⁸

From his deathbed, Peccei threw the torch to the COR members. In the letter dictated from his hospital bed, Peccei stated the COR needed to study the major challenges confronting the world that was on the edge of an epochal transition. He added that COR members had

to bring these major issues to the attention of the public at large and, of course, of scholars, religious leaders and decision makers... Only if all these sectors are sensitized to the obligation to devote all our capacities to confront the unprecedented perils and chances they embody, can our generation adequately play their role as worthy heirs of our forebears and responsible progenitors to future generations.⁵⁹

Peccei then outlined the direction he thought the COR had to take in contributing “to the renaissance of the human spirit and the redress of human fortunes in a sane society.”⁶⁰ He outlined five critical and decisive areas of inquiry that needed further exploration: human settlements, conservation of nature, governance of the global system, human development and encouraging the non-violent society.⁶¹

Peccei’s ability to motivate others to convince them of both the rightness of his cause and the need to use their personal positions of influence to further the quest for solutions to the “global Problematique” was astounding. Megarry said that when Peccei went to meet with the kings and queens of nations or with presidents and prime ministers, he went there to use them, not in any negative sense but to convince them that their elevated positions enabled them to make contributions to their nations and the world as

⁵⁸ Aurelio Peccei, “The Club of Rome: Agenda for the End of the Century, 8-13 March 1984,” (CACORA: COR Papers).

⁵⁹ Peccei, “The Club of Rome: Agenda,” p.2.

⁶⁰ Peccei, “The Club of Rome: Agenda,” p.3.

⁶¹ Peccei, “The Club of Rome: Agenda,” pp.3-10.

others could not. Megarry added that more often than not, Peccei was successful in gaining help, be it financial, moral or otherwise, from world leaders. Megarry remarked of Peccei “He was an inspiration to everyone who came in contact with him... It has been a great joy to know him. No one ever has inspired me more.”⁶²

Similarly, CACOR Chairman from 1983 to 1984 Ran Ide said that Peccei “was one of the great human beings of the world. I haven’t met anyone with the intelligence, ability, insight, charisma and dedication to compare with his. He was completely

⁶² Megarry was inspired by Peccei to collaborate with CARE Canada in establishing the Tools for Development Program. Under this still-existing program, CARE Canada “provides micro-entrepreneurs in the Third World with used tools and equipment donated from companies and individuals here in Canada. CARE Canada arranges shipping, makes sure donated gear is put to immediate use at its designated destination.” The website goes on to claim that it had never had a request for supplemental funds or repair parts and that it had provided “more than 4,000 pieces of equipment to 1,600 small businesses in the Third World. That’s meant continued employment for as many as 4,500 people.”

The CARE website explains that Megarry’s youth in an impoverished section of Belfast in Northern Ireland combined with his trips to lesser developed nations such as Peru led to his interest in creating the Tools for Development Program. That story however does not relate the critical inspirational catalyst role played by Aurelio Peccei in convincing Megarry of the need and ability to make a major contribution to the development of lesser-developed nations. Megarry commented in a conversation with this author that it was through conversations with Aurelio Peccei and through watching him conduct COR affairs at both the public and private levels that he became convinced to use his privileged position in society to make a positive contribution to developing nations of the world by using his extensive connections to Canada’s business community.

As publisher of Canada’s most influential national business newspaper, the *Globe & Mail*, Megarry had extensive contact with major business organizations and leaders. He was able to convince them to donate equipment to operations in less-developed nations. A partnership with CARE Canada seemed a natural fit with the organization’s practical long-term business oriented approach to economic development in less-developed nations. From CARE’s perspective, it was a “new and interesting source of contributions-in-kind from a business community that normally wouldn’t even dream of getting involved in development.”

The Tools for Development Program was not based strictly on recipients receiving free donated goods. Instead entrepreneurs were expected to purchase the equipment using special revolving funds that when repaid went into further credit programs for other entrepreneurs. The program reflected COR ideas that connected poverty, stability and the future of humanity. Megarry and CARE Canada believed that enabling local entrepreneurs to produce local goods, thus creating employment, would help reduce social tensions and help provide for a more stable and sustainable future in the less developed nations.

-- “Aurelio Peccei Industrialist Founded the Club of Rome,” *Globe & Mail*, (15 March 1984), p.10.

Megarry Interview.

CARE Canada, *Tools. Cool*, http://care.ca/make_a_dif/tls/tls_e.shtml, (accessed 3 March 2005).

CARE Canada, *Just the Facts*, (http://care.ca/make_a_dif/tls/fcts_e.shtml), (accessed 3 March 2005).

CARE Canada, *Tools: Born in the Slums*, http://care.ca/make_a_dif/tls/slm_e.shtml, (accessed 3 March 2005).

CARE Canada, *Tools Program Captures CARE's Practical Approach: A Conversation with Dr. A. John Watson, Executive Director of CARE Canada*, http://care.ca/make_a_dif/tls/ajw_e.shtml, (accessed 3 March 2005).

selfless.”⁶³ Other COR members, such as J. Rennie Whitehead, Ranjit Kumar, Dennis Meadows and Ivan Head added to this view. They concurred that Peccei was known for his ability to secure funding for major initiatives and COR meetings through the strength of his charisma and intellect.⁶⁴

Beyond financial concerns, Peccei was also the main intellectual driving force behind the COR’s mission to explore and find solutions to the “Predicament of Mankind”. Dennis Meadows said that Peccei dominated the organization, especially in terms of its intellectual framework and its interest in systems analysis.⁶⁵ Meanwhile, business commentators Robert Golub and Joe Townsend argued that the 1972 *Limits to Growth* report was “a computerized version of the major ideas of [Peccei’s] *The Chasm Ahead*.” They added that it served ‘as a tool of communication and conviction’ for Peccei’s ideas.⁶⁶

Peccei’s dedication to the Club of Rome had also helped to mask some serious internal problems. The inherent problem of Peccei’s domination of the COR was the question of succession: what would happen if he were no longer able to lead the organization? In March 1984, the COR members were forced to confront that question when Peccei’s secretary Anna Pignocchi sent a brief telex stating: “With deep sorrow

⁶³ - “Aurelio Peccei Industrialist Founded the Club of Rome,” *Globe & Mail*, (15 March 1984), (CACORA: Misc. Clippings).

⁶⁴ In addition to his substantial networking abilities and powers of persuasion, Peccei also used his personal wealth to support COR initiatives. J. Rennie Whitehead estimated that Peccei contributed upwards of US \$200,000 per year on Club of Rome activities. A year after Peccei’s death, Roy Megarry lamented the fact that COR activities required a minimum budget of \$200,000 and argued that COR members were not taking fund raising seriously enough which threatened the survival of the organization.

J. R. Whitehead, Conversation with Author October 2004. (Hereafter Whitehead October Interview)

Ranjit Kumar, Conversation with Author, January 2004. (Hereafter Kumar Interview).

Ivan Head, Conversation with Author, February 2004. (Hereafter: Head Interview).

Dennis Meadows, Conversation with Author, January 2004. (Hereafter Meadows Interview)

A. Roy Megarry, “Letter to Alexander King, 17 July 1985,” (CACORA: File 300: COR Correspondence – General), pp.3-4.

⁶⁵ Meadows Interview

⁶⁶ Golub and Townsend, “Malthus,” p.218.

inform you that Aurelio Peccei died this morning of a heart attack.”⁶⁷ It was a devastating and nearly fatal blow to the COR, whose members were left without their leader and driving force. The COR’s co-founder Alexander King commented that Peccei’s sudden death

found the COR in complete disarray. The members could not imagine their Club functioning in the absence of his extreme charisma. They soon realized also his immense contributions in the form of time, resources, contacts and ideas. The immediate response was that we should have to disband.⁶⁸

Dennis Meadows’ description of the COR as “Aurelio Peccei and friends” reflected King’s explanation that he and Peccei consulted their respective “wide networks of colleagues,” for members who had to be invited to join.⁶⁹ Without Peccei, the society of friends lacked a charismatic leader to act as a unifying force for an otherwise disparate group that ranged in occupational types from an American industrialist to a European banker; there were numerous academics from various disciplines; there was an African chief and even a Soviet communist commissar.⁷⁰ In a strongly worded 1985 resignation letter to CACOR, publisher Roy Megarry argued that latent concerns were becoming evident during the last years of Peccei’s presidency and while his death did not cause the problems they had “come into sharper focus since his passing.”⁷¹

With Peccei’s death in 1984, the COR seriously questioned the future existence of the organization. Moving beyond an initial reaction to disband, the COR decided to postpone any final decision and former French diplomat and COR member Bertrand

⁶⁷ Anna Pigocchi, “Telex to Ran Ide 15/03/84,” (CACORA: Newsletters Etc.), p.1.

⁶⁸ Meadows Interview.

King, “Club of Rome and Canada Questions,” p.7.

⁶⁹ King, “Club of Rome and Canada Questions,” p.1.

⁷⁰ King, “Club of Rome and Canada Questions,” p.2.

⁷¹ Megarry, “Letter to Alexander King, 17 July 1985,” p.1.

Scheider decided to act as the COR's interim head.⁷² Canada's Roy Megarry invited the COR's executive committee to his *Globe & Mail* office to decide if the organization was to continue and, if so, to decide who was to become the new COR president.⁷³ COR co-founder Alexander King described the meeting as "a brutal hair down discussion of the pros and cons of continuing our work."⁷⁴ Ultimately it was decided that the COR's "momentum and fund of good will should not be allowed to dissipate."⁷⁵ The COR would continue to exist with King as its president.

Despite the conviction that the COR still had a critical role to play in world affairs, serious problems that imperilled the group's future remained. One of the critical problems discussed at the *Globe & Mail* meeting was COR membership and its lack of diversity. Megarry argued that it remained too European, the developing world was underrepresented, as were women and, ominously, the COR was in desperate need of younger members.⁷⁶ King concurred and, in his first address as the COR president, he told members that there was a clear and present need to diversify the membership in terms of geographic and cultural representation. He further added that it was essential "to incorporate sufficiently the feminine element... and to include more younger people."⁷⁷

Peccei had been aware of the problems of an aging membership and dedicated the last few years of his life to creating a Forum Humanum. In 1982 a desire to engage a younger generation in discussing the Problematique led Aurelio Peccei and future COR President El Hassan bin Talal of Jordan to collaborate in establishing the Forum

⁷² King, "Club of Rome and Canada Questions," p.7.

⁷³ King, "Club of Rome and Canada Questions," p.7.

Hugo Thiemann, "Correspondence with Author, 3 February 2004," p.1.

⁷⁴ King, "Club of Rome and Canada Questions," p.7.

⁷⁵ Alexander King, "The Club of Rome – Reaffirmation of a Mission, 17 September 1984," (CACORA: COR Annual Meetings), p.1.

⁷⁶ Megarry, "Letter to Alexander King, 17 July 1985," p.2.

⁷⁷ King, "The Club of Rome – Reaffirmation of a Mission," p.2.

Humanum. It was designed to stimulate discussions and potential plans of action. It established a collaborative network of young individuals in diverse areas of the world who collectively attempted to depict a realistic desirable future. They also attempted to devise the means and circumstances required to make the desired future possible. Following Peccei's death, the programme waned.⁷⁸

The Forum Humanum initiative did not result in a revitalized COR membership as participants did not become leading members of the main COR body. In his 1985 resignation letter, Roy Megarry postulated that the existing COR members were a hindrance to revitalization because the largely inactive members refused to formally resign from the organization and allow their places to be taken by younger members. Megarry lamented that a year and a half had passed since the executive committee had agreed to take action on revitalizing membership but they had "failed to adequately purge our "active" membership list."⁷⁹

Members of the COR Executive Committee began to detect a growing sense of detachment within the membership where some COR members appeared content to be nominal members of the association. Megarry described such individuals as having "opted out" of the association.⁸⁰ President Alexander King was finally took action in 1986 when he invited such "members to become Associate members." King explained

⁷⁸ The basic idea was revived in the Think Tank 30 (TT30) initiative. That group continues today and entails a group of approximately 30 individuals between the ages of 25 to 35 from around the world who seek to work collaboratively in defining the World Problematique from a younger perspective and to seek solutions to its interrelated problems.

-- "Biography: His Royal Highness Prince El Hassan bin Talal," *His Royal Highness Prince El Hassan bin Talal, of the Hashemite Kingdom of Jordan*, <http://www.princehassan.gov.jo/main/biography.htm#top>, (accessed 28 March 2005).

TT30, *The Young Think Tank of the Club of Rome*, http://www.clubofrome.org/tt30/material/tt30_flyer.pdf (accessed 13 March 2005), p.1.

⁷⁹ Megarry, "Letter to Alexander King, 17 July 1985," p.2.

⁸⁰ Megarry, "Letter to Alexander King, 17 July 1985," p.2.

that this was meant to be a demotion for members who ceased to play an active role. They would still be considered members, but the change facilitated the inclusion of new and more active members.⁸¹

Other key problems brought to the fore with Peccei's death stemmed from his personal contributions. The COR had been able to operate as a "non-organization" in terms of bureaucratic structure because Peccei could either secure requisite funding for core COR activities, or else he paid the costs himself. In addition, Peccei relied heavily upon his personal support staff and secretaries to conduct COR administrative business. Roy Megarry commented that in Peccei's absence, it was critical that a COR Secretariat be established to assist the President in the operation and coordination of COR activities.⁸²

Canada offered to help the COR in its time of need by having operations transferred to Canada. Former President of the International Development Research Centre (IDRC) Ivan Head said offers were made to bring the COR to Canada and to have them operate out of the IDRC Offices in Ottawa. This would have enabled the COR to use IDRC staff in administrative matters and to use IDRC infrastructure to help with the distribution and coordination of COR initiatives.⁸³ While the IDRC offer might have helped to solve some serious post-Peccei administrative problems, COR rejected the offer. Head added that the offer was soundly rejected on the grounds that "The Club of Rome was a European operation and European it would stay."⁸⁴

⁸¹ Alexander King, "The Great Transition: Speech Delivered to the Sandford Fleming Foundation 5 June 1987," (Waterloo: Sandford Fleming Foundation, University of Waterloo, 1987).

⁸² Megarry, "Letter to Alexander King, 17 July 1985," p.6.

⁸³ Head Interview".

⁸⁴ Head added that following the rejection of the IRDC offer, he essentially washed his hands of the COR and never had any further contact with the organization. The lingering influence on Head's thinking was evident in his writings, which espoused COR ideas but lacked any direct mention of the organization. For

In addition to the lack of a support staff, with Peccei gone, the COR could no longer operate as a purely informal group of individuals united behind a common concern for the future. One of the first problems was that of leadership. Alexander King was eventually persuaded to assume the COR presidency. As the COR co-founder, he was the logical successor. Attempts to convince recently retired Canadian Prime Minister Pierre Trudeau to accept the presidency failed and there did not appear to be anyone willing to accept the burden.⁸⁵ With no other options available, King agreed to serve as the COR president for a two-year period.⁸⁶

Ranjit Kumar commented that while King did the best job that he could as COR President, he lacked “a certain sparkle” that Peccei had about him. Ivan Head added that King was getting elderly at the time and hence had diminishing energy levels.⁸⁷ King was

example in a 1989 article in *Foreign Affairs*, Head discussed at length the problems caused by a state of “disequilibrium” in North-South relations that made “the status quo unsustainable.” He added that the consequences of states of disequilibrium were not visible in the short term. According to Head, the short four to five year time frames associated with democratic governments meant that the problems of disequilibrium were “certainly not influential in the time frame occupied by decision-makers.”

Similarly, in his book *On a Hinge of History*, Head implicitly discussed the COR ideas. The book’s title was explained in terms similar to those presented by Aurelio Peccei. Head argued that the world was on the cusp of a major shift in human relations that went beyond traditional shifts in power alliances and it was “of a kind that has visited only occasionally in all of recorded history.” He further expounded on ideas parallel to the COR in his discussion of the interrelated nature of global politics, the benefits and potential dangers of technological advances, the complex relations and attitudes guiding the North-South dialogue and in the state of disequilibrium, the need for a multidisciplinary approach to find the means of moving towards greater equilibrium. When asked about the omission of the COR from his writings Head explained that “yes they should have been there” but the organization had left his active thoughts following the rejection of the offer to move the association to Canada, “that was it for that.”

Head Interview.

Ivan L. Head, “South-North Dangers,” *Foreign Affairs*, (Summer 1989), p.76, p.84.

Ivan L. Head, *On A Hinge of History: The Mutual Vulnerability of South and North*, (Toronto: International Development Research Centre and University of Toronto Press, 1991), p.5, pp.7-8, pp.14-15, pp.20-22, p.41, p.55, pp.58-59, pp.70-71, pp.194-195 and pp.200-201.

⁸⁵ In a letter to Trudeau in March 1984 Canadian internationalist J. King Gordon said that he had “learned with considerable interest that [Trudeau] had been invited to assume leadership of the Club of Rome following the sad death of Aurelio Peccei.”

J. King Gordon, “Letter to Pierre E. Trudeau, 30 March 1984,” (NAC: MG30 C241 Vol.62 File 62-11 Club of Rome 1976-1984), p.1.

⁸⁶ -- “Minutes of the Tenth Annual General Meeting of the Canadian Association for the Club of Rome, 23 September 1984,” (CACORA: File 608 Tenth Annual General Meeting CACOR-Sept. 1984), p.2.

⁸⁷ Kumar Interview.

a reluctant president who had only agreed to be the interim president. He continuously laboured to secure a successor. Roy Megarry commented that while King was Peccei's logical successor, there did not appear to be anyone who was willing and/or able to lead the COR into the future. Such an individual would have required "a great deal of physical, intellectual and managerial capacity." He added that ideally, the person would not be a European.⁸⁸

By 1987, King's frustration with being unable to secure a successor was evident in a speech to the Sandford Fleming Foundation at the University of Waterloo. After making several complaints about being too old for the job, King said that he was not able to find anyone, largely because the COR presidency was an intensive job that required a massive contribution of time and effort, for no pay.⁸⁹ The following year he announced that he was stepping down and handing the reins to someone else. It took another two years to find a replacement. In 1990, King's successor, Chemical Engineer and academic Ricardo Diez-Hochleitner from Spain became the new COR president. With Diez-Hochleitner's assuming the presidency, the initial era of COR activities that were dominated by the co-founders Peccei and King came to an end. King continued on as President Emeritus but for the Club of Rome, a new era had begun.⁹⁰

Head Interview.

⁸⁸ Megarry, "Letter to Alexander King, 17 July 1985," p.5.

⁸⁹ King, "The Great Transition".

⁹⁰ Ricardo Diez-Hochleitner served until 1999, when the current COR President His Royal Highness Prince El Hassan bin Talal of Jordan became President.

-- "Der Club of Rome hat einen neuen Präsidenten," *Aussichten*, <http://www.aussichten-online.de/hassan.html> (accessed 28 March 2005).

-- "Biography: His Royal".

J. Rennie Whitehead (editor), "New President of the Club of Rome," *CACOR Newsletter*, (April 1990), p.1.

Brian Mulroney and Market-Based Policy Development

Peccei's death came at an especially inopportune time, as the political and intellectual climate in Canada and beyond was becoming increasingly hostile to COR/CACOR ideas. Beyond a loss of key bureaucratic contacts and Peccei's death, the essence of the COR's message of the need to ultimately control the forces of growth and the need of governments to guide the world into the future were on the cusp of becoming relics of an intellectual tradition that had run its course.

As discussed above, Margaret Thatcher and Ronald Reagan's public policy ideas placed a premium on allowing free markets to operate as far as possible without the interference of governments.⁹¹ Their ideas arrived firmly in Canada during the reign of Brian Mulroney. Signs of Mulroney's penchant for market-based solutions appeared in the years before he came to power. In a May 1982 address, Mulroney did not reject Keynesian economic theory in its totality but felt it was no longer a viable option for the

⁹¹ Commentators, such as the ones in this citation, often refer to the advocates of ideas being espoused by Thatcher and Reagan as neo-conservatives. The movement emerged as the result of a split within the American liberal establishment and Democratic Party in the turbulent late-1960s to mid-1970s over American foreign policy and policy responses to Communism. The term neo-conservative was first coined in 1976 to refer to a former liberal who had moved significantly to the right of the political spectrum. Self-professed neo-conservative Midge Decter described all neo-conservatives as simply "one who has arrived at conservatism from the Left, and whose politics are far more politics in the head than in the local precinct or even national political party."

Current controversies over the globalization phenomena illustrate a lack of precision of the term neo-conservative and further illustrate the decaying of notions concerning liberal and conservative ideology. Sociologist Trevor Harrison argues that neo-conservative attitudes towards globalization "might better be termed 'neo-liberalism.'"

American political scientist J. David Hoeveler, Jr. argued that even within the Regan camp in the early 1980s there emerged strong tensions and suspicions between the traditional conservatives and the neo-conservatives.

For an excellent discussion of the various degrees of neo-conservative thought read

John Ehrman, *The Rise of Neoconservatism: Intellectuals and Foreign Affairs 1945-1994*, (New Haven: Yale University Press, 1995), pp.33-35, pp.45-47 and p.136.

Midge Decter, "Neocon Memoir," *American Jewish History*, (Volume 87 Nos. 2&3, 1999), p.183.

Neil Nevitte and Roger Gibbins, "Neoconservatism: Canadian Variations on an Ideological Theme?" *Canadian Public Policy*, (No. 4. 1984), pp.388-392.

Trevor Harrison, *Of Passionate Intensity: Right-Wing Populism and the Reform Party of Canada*, (Toronto: University of Toronto Press, 1995), pp.312-313.

J. David Hoeveler, Jr. "Conservative Intellectuals and the Regan Ascendancy," *The History Teacher*, (Volume 23 No. 3, May 1990), pp.305-306.

federal government. He accused the Trudeau Liberals of committing “one of the cruellest acts of economic infanticide in recorded history,” by having “smothered” Keynesian economics due to an insistence on continuing to spend and amass large deficits that undermined the government’s financial manoeuvrability and, ultimately, its ability to act as an economic moderator.⁹²

In a December, 1984 address to an American audience, Mulroney argued that Canada had traditionally had a far more activist/ interventionist government than did the United States. He quickly added, however, that his government was determined “to redefine the role of government itself.” The Prime Minister explained that the Canadian government had “become much too big. It inhibit[ed] and distort[ed] entrepreneurial activity.... [government had] become a major obstacle to growth in the private sector.” His government had no choice but to “adopt an approach that reward[ed] entrepreneurship and risk-taking, and facilitat[ed] adjustment to the changing realities of new markets and technologies.”⁹³

Canadian political historian Reginald Whitaker stated that Margaret Thatcher, Ronald Reagan and Brian Mulroney commonly “viewed government as inherently inefficient and wasteful, and favoured extending the scope of the private sector and the

⁹² Similar arguments concerning the problems of government’s relative lack fiscal manoeuvrability, an inability to continue using deficit financing to cover public services, and how changes in “new economic world order” can also be found on the left of the political spectrum. Former Saskatchewan Finance Minister Janice MacKinnon commented in her memoirs about her experiences in Roy Romanow’s NDP government from 1993 to 1997: “Politicians had to reshape Canadian’s expectations of government... Running deficits to protect people from today’s hardships was merely handing the bills on to future generations. Governments were pressured to focus their efforts and resources not only by the fiscal crisis but also by the changes required for success in an increasingly competitive, open, private-sector dominated economy.”

Brian Mulroney, “Control of Government Spending,” in Brian Mulroney, *Where I Stand*, (Toronto: McClelland and Stewart Limited, 1983), p.45.

Janice MacKinnon, *Minding the Public Purse: The Fiscal Crisis, Political Trade-Offs and Canada’s Future*, (Montreal: McGill-Queen’s University Press, 2003), p.60.

⁹³ Brian Mulroney, “New Climate for Investment in Canada,” *Statements and Speeches No.84/18*, (Ottawa: Cultural and Public Information Bureau, Department of External Affairs, 1984), p.5.

principles of the free market.”⁹⁴ Political scientists Robert Campbell, Leslie Pal and Stephen Clarkson argue that as early as 1985 the influence of Reagan’s worldview was emerging as an important factor in Canadian approaches to policy development. At the 1985 “Shamrock Summit” where Reagan and Mulroney embraced, it was evident that they “liked one another... shared a vision of Canada and the United States... shared a belief, though in different measure, in the efficacy of market systems and the need to minimise...the role of government in everyday life.”⁹⁵ Clarkson argued that Mulroney “flaunted his warm personal contact with Ronald Reagan based on their common ideology.”⁹⁶

The contrast in attitude between Trudeau and that embraced by Thatcher, Reagan and Mulroney was evident in Trudeau’s *Memoirs* where he described their policy views as “wrong, wrong, wrong.”⁹⁷ Trudeau went on to explain that the reliance on strictly

⁹⁴ Reginald A. Whitaker, “Politicians and Bureaucrats in the Policy Process,” in Whittington and Williams, *Canadian Politics*, p.433.

⁹⁵ Robert M. Campbell and Leslie A. Pal, *The Real Worlds of Canadian Politics, Second Edition*, (Peterborough: Broadview Press, 1991), p.190.

⁹⁶ Stephen Clarkson, *Uncle Sam and Us: Globalization, Neoconservatism and the Canadian State*, (Toronto: University of Toronto Press, 2002), p.27, p.386.

⁹⁷ Journalist Bruce Hutchison said that Trudeau and Thatcher “seldom agreed on anything,” and “Trudeau regarded [Reagan] with scepticism verging on intellectual contempt.” The October 1994 issue of *Saturday Night* contrasted the reciprocal attitudes of Thatcher and Reagan to Trudeau in the article “Who Does This Asshole Think He Is?” (Pierre Trudeau's Relations With Ronald Reagan And Margaret Thatcher). Brian Mulroney used the same expletive to describe the former Prime Minister. The *Globe & Mail* reported that Mulroney viewed “Pierre Trudeau [as] ”a bully,” a “coward” and “a weakling”; to Mila Mulroney, Trudeau [was] a “short, ugly man,” less sexy than her blue-eyed, honey-voiced husband.”

Trudeau, *Memoirs*, p.189.

Bruce Hutchison, *The Unfinished Country: To Canada With Love and Some Misgivings*, (Vancouver: Douglas & McIntyre, 1986), p.106, 147.

Christina McCall and Stephen Clarkson, “Who Does This Asshole Think He Is?” (Pierre Trudeau's Relations With Ronald Reagan And Margaret Thatcher,” *Saturday Night*, (Volume 109 No. 8 October 1994), pp.36-9.

--- “Mulroney Book Slams Trudeau,” *National Post*, <http://www.canada.com/national/nationalpost/soundoff/story.html?id=ce893ad7-86e4-4fe5-88a0-66daee322bf1>, (accessed 21 September 2005).

Peter C. Newman, “Introduction: Mulroney Unplugged,” *National Post*, <http://www.canada.com/national/nationalpost/soundoff/story.html?id=ce893ad7-86e4-4fe5-88a0-66daee322bf1>, (accessed 21 September 2005).

market forces may appear appealing in strictly economic terms but it was not always beneficial to society in general.⁹⁸ Beyond that, there was the problem of the state forfeiting the ability “to control the excesses of the market.”⁹⁹ It was an equivalent attitude to the message preached by Club of Rome arguing that unfettered economic growth was ultimately self-defeating, unsustainable and that growth had to be regulated.

The “freeing” of the free-market is of the greatest importance to this dissertation, as it implied and encouraged perpetual unfettered growth as the best possible option for public policy aims. As discussed in previous chapters, the Club of Rome (COR) was founded largely to combat the notion that the earth could sustain a “growth for growth’s sake” philosophy that was prevalent in the boom decades following the end of the Second World War. The backlash against the idea of imposing limits on growth was a severe and, ultimately, successful effort that crushed the COR’s fundamental ideas.

The fundamental Keynesian idea of the need for government guidance, or as critics would have it, interference, of market forces was also an Achilles heel in Club of Rome philosophy. Academic Stephen Clarkson said that in Canada, the minimalist

Andrew Cohen, “Mulroney Lets it All Hang Out,” *Globe & Mail*, <http://www.theglobeandmail.com/servlet/story/RTGAM.20050915.bkmulr0917/BNStory/SpecialEvents>, (accessed 21 September 2005).

⁹⁸ In December 1997 on the tenth anniversary of the Canada-US Free Trade Agreement (FTA) journalist Carol Off commented, “Canada did well, Canadians did not.” She explained that the economy grew, corporations expanded and record profits were reached but high unemployment appeared to be entrenched and quality of life had deteriorated. Under the program, former Prime Minister John Turner commented that Canada had lost 25% of its manufacturing base in the initial three-year period and had failed to close a productivity gap with the Americans. In terms of economic growth, the measure of importance for Mulroney and similar minded neo-conservatives, the deal was a success. However, its contributions to ensuring a better quality of life for citizens and its impact on Canadian society into the future remained debateable. Both Turner and Mulroney agreed that it would take decades or longer to pass any verdicts on the impact of the FTA

Trudeau, *Memoirs*, p.189.

Carol Off, “Open for Business: Deal of the Decade, 10 December 1997” *CBC: The National Magazine*,: CBC Archives Online: http://archives.cbc.ca/IDC-1-73-536-2804/politics_economy/free_trade/clip11, (accessed 19 September 2005).

⁹⁹ Trudeau, *Memoirs*, p.189.

approach to governance rejected traditional notions about state-centred responses to policy issues and viewed any state interference in economic matters “as a mistake.”¹⁰⁰ Clarkson once wrote that free market-based policy analysis “knitted macroeconomic, industrial, and trade policy into a coherent pattern that buried Keynes.”¹⁰¹ Similarly, Canadian political scientists Neil Neveitte and Roger Gibbins, argued that for market advocates, the idea of “government intervention [was] as often as not a cure worse than the disease.”¹⁰² Analogous to the funeral rituals of Ancient Egypt where close acquaintances and selected subjects of the Pharaoh were interred with their master, so the Club of Rome philosophy and influence in Canada was “buried” when Keynesian economic theory succumbed to free market-based political theory.¹⁰³

CACOR Challenges

Beyond the turmoil within the main COR group and the other challenges detailed above, CACOR faced particular difficulties that threatened the group’s survival. The problems ranged from reduced travel budgets for members who were civil servants and a declining membership to problems of apathy and a changed political climate. Potential problems for the CACOR were identified early in its development by the C.D. Howe Institute’s President Robert Fowler who played a primary role in establishing the CACOR and who helped to guide the nascent organization through its initial stages. In 1977, Fowler argued that the CACOR membership was not sufficiently geographically dispersed and there were insufficient voices from the labour and business communities.

¹⁰⁰ Clarkson, *Uncle Sam*, p.10, p.409.

¹⁰¹ Clarkson, *Uncle Sam*, p.28.

¹⁰² Neveitte and Gibbins, “Neoconservatism,” p.393.

¹⁰³ Leslie V. Grinsell, *Barrow, Pyramid and Tomb: Ancient Burial Customs in Egypt, the Mediterranean and the British Isles*, (Boulder: Westview Press, 1975), p.39.

At the end of 1976, the CACOR membership lists showed that of its 75 members, 54 were from Ontario with 23 of that number residing in Ottawa. The four western provinces had a total of six members while Quebec had fourteen, leaving the Atlantic Provinces with a single CACOR member.¹⁰⁴

Fowler was impressed with the large percentage of CACOR members who were either scientists or academics. However, he felt that the organization was still lacking substantial input from a sufficiently diversified membership and the voices of stakeholders were not represented. Fowler, with some success, endeavoured to use his connections as head of the then-centrist C.D. Howe Institute to bring voices from the left and the right to CACOR meetings. Fowler was convinced the association needed to make special efforts to ensure the voices of both organized labour and the business community were heard.¹⁰⁵ By 1984 when Peccei died, membership diversity had not improved and CACOR faced a series of additional problems.

By the early 1980s, the CACOR also began to face serious financial challenges due to a combination of governmental, corporate and organizational travel-expense policy changes. These were exacerbated by CACOR member apathy and the costs of supporting the main Club of Rome organization in the wake of Aurelio Peccei's death. CACOR co-founder Rennie Whitehead said that at one point "several large organizations

¹⁰⁴ -- "Canadian Association for the Club of Rome Membership list as of November 1, 1976," (CACORA: File 1009 Membership Statistics(CACOR) pp.1-3.

¹⁰⁵ Robert M. Fowler, "Letter to J. Rennie Whitehead, 23 March 1977," (CACORA: File 305 Correspondence CACOR Jan-May 1977), pp.1-2.

R. M. Fowler, "Letter to Joseph Morris, 23 March 1977," (CACORA: File 305 Correspondence CACOR Jan-May 1977), pp.1-2.

Wyman Trineer, "Business, Government & Labour Interaction: Issues for the 1980's," and Paul Leman, "Business, Government & Labour Interaction: Issues for the 1980's, A Response," Fred Thompson, (editor), *Excerpts of Papers from the Conference "Shaping the Future,"* (J. Rennie Whitehead, Personal Archive), p.194, p.203.

also absorbed expenses for a senior executive to attend COR or CACOR meetings,” but that practice slowly ended.¹⁰⁶ He added that while he was a senior civil servant, the CACOR and by proxy the COR, had access to funding, but Whitehead left the federal civil service in 1976.¹⁰⁷

In addition, during the recession of the 1980s, issues associated with trimming travel expenses became a major concern in governmental circles and beyond. In 1985, American Express came out with a major report outlining problems for business of travel expenses and offered strong suggestions to control escalating travel costs for business. By the mid-to-late 1980s, less generous travel management procedures became the norm. As a result access to travel funds, especially additional funding for extraneous purposes, became harder to secure.¹⁰⁸

Changes in the operations of the federal bureaucracy under Trudeau also meant that any contacts within the civil service were likely to be transient. An external review about CACOR in 1979 commented that the “influence of key and/or active members [were] waning.”¹⁰⁹ By 1979, the way the federal government allocated funds underwent a fundamental change when the Policy Expenditure Management System (PEMS) program was brought in to replace the Planning, Programming Budgeting System (PPBS).

Political scientist Donald Savoie explained that the motivation was to establish tighter

¹⁰⁶ J. Rennie Whitehead, “Email to Author 29 March 2005”.

¹⁰⁷ Whitehead, “Email to Author 29 March 2005”.

-- “Whitehead, James Rennie,” in Elizabeth Lumley (editor), *Canadian Who's Who 2003 Volume XXXVIII*, (Toronto: University of Toronto Press, 2003), p.1432.

¹⁰⁸ Douglas McArthur, “Travelling on Business Staff Happily Went Coach In 'Singapore Solution',” *The Globe & Mail*, (1 April 1987), p.C2.

Pat Brennan, “Travel Budgets Seen as \$1.5 Billion too Fat,” *Toronto Star*, (11 February 1987), p.E1.

Teri Agins, “More Firms Act To Reduce Cost Of Air Travel,” *The Wall Street Journal*, (15 April 1985), p.1.

Arthur Sandles, “The £1bn Sitting in Employees' Pockets,” *Financial Times*, (17 May 1985), p.32.

Doug Carroll, “Pinch pennies: Get a Travel Manager,” *US Today*, (24 October 1988), p.E6.

¹⁰⁹ Boston, Gilbert, Henry Associates Ltd., “Long Range Planning Review for the Canadian Association for the Club of Rome 15 February 1980,” (CACORA: Not filed), pp.4-5.

spending controls and increased responsibility for expenditures at the ministerial level. Under the older system, policy decisions were made separately from spending decisions and departments were left to make their adjustments. However under PEMS both policy and expenditure decisions had to be taken concurrently.¹¹⁰ As a result, bureaucratic discretionary spending was curtailed. Shortly after assuming power in September 1984, Brian Mulroney announced that all bureaucratic hiring and discretionary spending was to be frozen and subsequently he introduced even tighter controls.¹¹¹

In September 1979, concerns over the operation and future of the CACOR led CACOR President William Stadelman to contract Ralph Boston to do a study of the CACOR with a view to suggesting future directions for the Association. CACOR members did not appear to have a problem with the idea of an overview, but resented the idea of hiring an outside consultant as CACOR members devoted their time and efforts to the Association for free. To add to the problem, CACOR members felt that they were more qualified to perform the task.¹¹² The Boston Report generated far more controversy within the CACOR because of the circumstances that led to the report; few disagreed with its findings.

Tensions within the organization continued to build until at the 1980 annual general meeting, matters reached a flashpoint. Chairman Stadelman attempted to have colleagues of his join the CACOR without having gone through the established procedures of first getting permission from the CACOR Executive. The move was met with stiff resistance and a break had to be called part way through the proceedings. The

¹¹⁰ Donald J. Savoie, *Governing From the Centre: The Concentration of Power in Canadian Politics*, (Toronto: University of Toronto Press, 1999), pp.39-40

¹¹¹ Savoie, *Governing*, p.170.

¹¹² Whitehead, "Email to Author 29 March 2005".
Boston, et al., "Long Range Planning," p.1.

CACOR members refused to accept Stadelman's nominees and attempted to get the Chairman to withdraw them and to continue with the meeting.¹¹³ In response, Stadelman resigned completely from the organization. He perceived that the CACOR had deteriorated to the point of becoming "an organization content to meet and discuss the Problematique."¹¹⁴

The Boston Report had earlier questioned the viability of the CACOR's future and argued that it needed to develop new sets of goals that were Canadian-oriented. A more populist set of activities would attract significant attention, thus stimulating an increased membership so as to help allay fiscal problems. The Report also commented that CACOR's traditional message about the importance of the Problematique had been largely accepted and that subsequent messages were "not catching the public eye."¹¹⁵ Stadelman warned the CACOR that "unless they became active and supported research the organization would slowly wither and die." In recent correspondence with this author he bluntly added, "It did."¹¹⁶

The greatest problem facing CACOR appeared to be financial. The Boston Report showed that support from government and industry was on the decline at the same time as interest in the group's annual general meetings dissipated. Hence, revenues generated from such meetings declined.¹¹⁷ Furthermore, the CACOR faced serious financial challenges due to 36% of its members not paying membership dues. The Report went on to strongly suggest that a fundraising effort was required to generate between \$50-\$75,000 for each of the subsequent five years in order to ensure the CACOR's

¹¹³ Whitehead, "Email to Author 29 March 2005".

¹¹⁴ W. R. Stadelman, Letter to Author, 8 March 2004.

¹¹⁵ Boston et al, "Long Range Planning, " p.4.

¹¹⁶ Stadelman, Letter.

¹¹⁷ Boston et al, "Long Range Planning, " p.4.

viability.¹¹⁸ Whitehead commented that many of the tensions within CACOR over the Boston Report were “a symptom of turbulence caused fundamentally by the continual attempt to run CACOR on a purely voluntary basis à la Peccei without the equivalent of Peccei's personal subsidy.”¹¹⁹

Without substantial financial reserves, the CACOR struggled with questions of how to develop a sufficiently ambitious and provocative program of activities to attract new members to the Association. In July 1983, a proposal to commission well-known Canadian author Farley Mowat to prepare a future strategy for dealing with the *Problematique* was rejected due to the inherent costs. In addition the notion of arranging funding for a special film on the *Problematique* was viewed as too financially onerous to be pursued.¹²⁰ Similarly, a lack of support caused plans for a Winnipeg conference to be cancelled. As well, plans for a memorial lecture series to honour the life and global contributions of Club of Rome co-founder Aurelio Peccei were considered too expensive to organize.¹²¹

Frustration with the lack of dedication to finding and supporting innovative research projects led key CACOR members to question their continued presence in the organization. Tom de Fayer announced “the inability of CACOR to achieve more than just a ‘friendly rubbing of shoulders’” led him to consider resigning his executive position. He further added that other Board members who had served as long or longer

¹¹⁸ Boston et al, “Long Range Planning, ” p.4.

¹¹⁹ Whitehead, “Email to Author 29 March 2005”.

¹²⁰ B. E. Moss, “Letter to R. E. Boston, 21 July 1983,” (CACORA: File 312 CACOR Correspondence 1983), p.1.

¹²¹ -- “Minutes of the Tenth Annual General Meeting of the Canadian Association for the Club of Rome, 23 September 1984,” (CACORA: File 608 Tenth Annual General Meeting CACOR-Sept. 1984), pp.1-2.

than he had ought to consider doing the same in order to make room for others to lead.¹²²

He was subsequently convinced to change his mind and he resumed a Board position in 1984, when he also agreed to be editor of the *CACOR Newsletter*.¹²³

Verge of Collapse

The CACOR was on the verge of dissolution in 1984 and 1985. In October 1984, CACOR Chairman Ran Ide wrote a worried letter to COR President Alexander King stating “our cupboard was bare, our charitable donation number had been withdrawn and the membership had been allowed to dwindle away.”¹²⁴ The Ide letter followed a special CACOR executive meeting that questioned the feasibility of continuing the organization at all. In September 1984, the CACOR found itself “without the resources to cover the costs of board meetings and even basic but necessary administrative expenses” It was felt the group had to take “a draconian step” to reduce the Board to five individuals with the financial and institutional wherewithal to continue CACOR initiatives and to improve the group’s financial base for future operations.¹²⁵

At the September meeting, Chairman Ran Ide announced that a “rebuilding process had commenced.”¹²⁶ He later added that he was stepping down but would be

¹²² T. L. deFayer, “Letter to Ran Ide 15 November 1983,” (CACORA: File 312 CACOR Correspondence 1983), p.1.

¹²³ Ran Ide, “Letter to Alexander King, 8 October 1984,” (CACORA: File 314 CACOR Correspondence June- Dec. 1984), p.2.

B. Moss, “Letter to CACOR Members, 3 December 1984,” (CACORA: File 314 CACOR Correspondence June- Dec. 1984), p.2.

Whitehead, “Email to Author 29 March 2005”.

¹²⁴ Ide, “Letter to Alexander King, 8 October 1984,” p.1.

¹²⁵ Ran Ide, “Letter to the Members of the Board of Directors of the Canadian Association for the Club of Rome, 13 September 1984,” (CACORA: File 314 CACOR Correspondence June- Dec. 1984), p.2.

¹²⁶ -- “Minutes of the Tenth,” p.1.

willing to continue to help in any way he could in ensuring the CACOR survived.¹²⁷ Ide added that hope for the future of the CACOR in 1984 resided with Michael Kirby who, as explained in chapter five, was instrumental in transforming the Institute for Research on Public Policy (IRPP) into an active organization that produced tangible results.¹²⁸ The outgoing CACOR Chairman explained to Alexander King that Kirby was an ideal candidate as he was “young, able and as a Senator [had] an office and other support.”¹²⁹ However, problems persisted and long-time CACOR member Kenneth Hammond said that after Ide, the CACOR never regained its strength.¹³⁰

Despite the potentially fatal problems facing the CACOR, in December 1984 the organization endeavoured to continue on. However, financial constraints made advancement difficult. The 5000 Days Project led by Ken Hammond was highlighted as a major shining light of CACOR activity; as noted above, it was an activity that required no financial contributions from the CACOR. A second encouraging project was the release of Roger Voyer’s *Global 2000 – A View of Canadian Economic Prospects, Resources and Environment*.¹³¹ This was a project that had spun-off from the Gerald S. Barney *Global 2000: Implications for Canada* project that had secured funding circa 1980-1981 from the Department of the Environment thanks to the efforts of CACOR members W. R. Stadelman and Tom de Fayer.¹³²

¹²⁷ Ide, “Letter to the Members,” p.3.

¹²⁸ Peter Dobell, *IRPP, Institute for Research on Public Policy: The First Thirty Years*, (Montreal: Institute for Research on Public Policy, 2003), pp.21-22, pp.29-31.

Elizabeth Lumley, (editor), “Kirby, Hon. Michael J. L.,” in *Canadian Who’s Who 2003 Volume XXXVIII*, (Toronto: University of Toronto Press, 2003), p.723.

¹²⁹ Ide, “Letter to Alexander King, 8 October 1984,” p.1.

¹³⁰ Kenneth Hammond, Conversation with Author, April 2005.

¹³¹ Moss, “Letter to CACOR Members, 3 December 1984,” pp.1-2.

¹³² Gerald O. Barney, *Global 2000: Implications for Canada*, (Toronto: Pergamon Press, 1981).

W. R. Stadelman, “General Letter 23 May 1980,” (CAOR Archives: File 309 “CACOR Correspondence, 1980), p.1.

However, the changed political climate discussed in the previous chapter and above also weighed on the minds of the CACOR. Members realised that it was going to be more difficult to gain the attention of the Brian Mulroney's government than it had been under Pierre Trudeau. In a letter to the CACOR Chairman, an anxious Tom de Fayer requested to know Kirby's ideas about the CACOR's future and to ask for his help in popularizing the Voyer publication. In that letter, de Fayer said "some of the conclusions and recommendations of the report may not be as attractive to our present government as to the previous regime."¹³³ In the words of former NDP advisor Robin Sears, by the 1980s "Keynesianism was dead... The "market" was being promoted as political and economic master."¹³⁴

A third activity was the resurrection of the CACOR Newsletter. De Fayer was convinced to resume his editorial job of keeping members informed of both COR and CACOR activities.¹³⁵ CACOR member Rennie Whitehead said that a lack of submissions from CACOR members meant that the newsletters "became increasingly a reflection of Tom's own thinking on the Problematique."¹³⁶ The three areas outlined above of CACOR activity did not require any expenditure, had started in the past, and were predominantly reliant on the steadfast efforts of a single individual. Sadly, the need to develop an

Stadelman, "Regarding the Club of Rome".

Tom deFayer, "Letter to Adam Schaff, 6 June 1987," (CACORA: File 5013" Report to the Club of Rome – What are we Heading For?"), p.1.

¹³³ Tom de Fayer, "Letter to Michael Kirby, 8 December 1984," (CACORA: File 314 CACOR Correspondence June- Dec. 1984), p.1.

¹³⁴ Robin V. Sears, "The Left: From Hope to Sneers in Only 25 Years," *Policy Options*, (March-April 2005), p.20.

¹³⁵ Moss, "Letter to CACOR Members, 3 December 1984," p.2.

¹³⁶ J. Rennie Whitehead, "Tom and CACOR," in Gail Stewart (editor) *Thomas L. de Fayer (1919-1999): A Tribute by Some of his Friends and Colleagues*, (Ottawa: Gail Stewart, 2004), p.7.

ambitious and innovative research plan to attract members and public attention were considered beyond the financial ability of the CACOR to pursue.¹³⁷

By 1985, internal tensions and divisions amplified as questions of primary loyalty and responsibility came to the fore. As mentioned earlier in this chapter, Aurelio Peccei's death in March 1984 cast a psychological and financial pall over the Club of Rome and imperilled its future. One of the key challenges was how to maintain operations without Peccei's personal financial backing. The autonomous, but nominally-and-intellectually-affiliated national COR associations were viewed by the remaining COR executive as a partial solution to funding problems.¹³⁸

It was with the intention of using CACOR to help in the raising of funds for the COR that Roy Megarry accepted a position on the CACOR Executive as Vice-Chairman in charge of finances.¹³⁹ Megarry viewed the CACOR as an important vehicle in "raising funds for the survival of the COR" and by April 1985, he had raised over \$15,700 in support. However he had erroneously issued tax-receipts that later had to be rescinded.¹⁴⁰ The episode caused substantial conflict as the perception that CACOR was being asked to be used "simply as a vehicle for the collection of funds for the COR," met with stiff resistance and resentment.¹⁴¹

¹³⁷ Moss, "Letter to CACOR Members, 3 December 1984," p.2.

¹³⁸ Ide, "Letter to Alexander King, 8 October 1984," p1.

Moss, "Letter to CACOR Members, 3 December 1984," p.1.

¹³⁹ Ide, "Letter to Alexander King, 8 October 1984," p1.

Moss, "Letter to CACOR Members, 3 December 1984," p.1.

¹⁴⁰ CACOR, "Meeting Proceedings 15 April 1985," (verbatim transcript from J Rennie Whitehead to Author on 29 March 2005), p.1.

¹⁴¹ T.L. de Fayer, "CACOR Board Discussions: Notes 27 April 1985," (CACORA: File 700 CACOR Board Notes), p.3.

Long-time CACOR member Kenneth Hammond said that the CACOR began to seriously deteriorate when Ran Ide stepped down as its President.¹⁴² The slide continued until the end of 1985, when Megarry left both the COR and CACOR and Kirby resigned as CACOR President.¹⁴³ The story of CACOR problems and near-dissolution in the mid 1980s reflects a degenerative process identified by political scientist Diane Stone. In a book on the role, influence and fate of think tank type organizations she stated:

“Frequently, the financial circumstances... are dire. Decline entails an inability to act on policy. New projects do not get off the ground; publications are not forthcoming. Efforts to forge links with politicians, bureaucrats... are not initiated.”¹⁴⁴

Despite internal problems and problems with a loss of status and influence within federal bureaucratic spheres, Beatrice Bazar, who replaced Michael Kirby as CACOR

¹⁴² Hammond, “Conversation”.

¹⁴³ CACOR’s loss of key contacts with key federal policy players was analogous to problems that proved fatal to the Canadian Committee for the International Institute for Applied Systems Analysis (IIASA). Due in large part to CACOR individuals such as Whitehead and Kirby, Canada had been an important partner in IIASA’s creation and had consistently donated funding for its programs. In 1980, CACOR had arranged for a Canadian contribution of \$400,000 dollars annually for a six-year period.

By the 1990s, Canadian contributions were in the range of \$1 million per year. With budget constraints of the early 1990s, expenditures on foreign science initiatives became a target for cutbacks. Despite the efforts of key IIASA members, such as Professor Sten Nilsson and Jay Forrester, and the Canadian Committee for the IIASA, Canada formally withdrew from the organization in 1996.

The Chairman of the Canadian Committee, Paul Dufor explained that ties were severed, in part, as the IIASA was not viewed as conducting research that was directly relevant to the development of Canadian public policy. Canada was interested in the IIASA’s sub-arctic boreal forest initiative led by the Swedes, its economic futures program led by the Italians as well as its Young Scientists Program in which Canadian university students participated. However, on the whole, the IIASA research program was viewed as being of little value. While the organization had the support of former Canadian IIASA representatives, such as Michael Kirby, and a letter writing campaign, within main line federal departments, there was little knowledge and little interest in the organization. Dufor said that in terms of the IIASA’s “constituency, the political base in terms of a champion was simply not there.”

Boston et al., “Long Range Planning,” p.35.

Paul Dufor, Conversation with Author, April 2005.

Sten Nilsson, Email to Author, 7 March 2005.

International Institute for Applied Systems Analysis (IIASA), *Forestry Program*, <http://www.iiasa.ac.at/Research/FOR/index.html?sb=1>, (accessed 10 May 2005).

IIASA, *Programs for Young Scientists*, <http://www.iiasa.ac.at/Admin/YSP/index.html>, (accessed 10 May 2005).

¹⁴⁴ Diane Stone, *Capturing the Political Imagination: Think Tanks and the Policy Process*, (London: Frank Cass & Co. Ltd., 1996), p.74.

President in 1985, was able to prevent CACOR's dissolution. Bazar had in 1967 been a founding member of the Canadian Human Rights Foundation (CHRF).¹⁴⁵ Using her organizational skills and experience, she guided CACOR to ensure its survival. The strategy developed to ensure CACOR's continuance was to consolidate efforts at the local level and to link local CACOR chapters together in the national association, but each chapter would operate independently in a similar relationship as between the main Club of Rome and its national associations. The process was strongest in Ottawa where frequent meetings were held among Ottawa-based CACOR members.¹⁴⁶

In 1988, new CACOR President Erik Solem declared that the CACOR was forced to enter a new phase of operations. In a letter to Kenneth Hammond, Solem stated: "Aurelio Peccei cannot be resurrected, the big money is gone and government's interest in [matters related to the Problematique] is spasmodic and erratic."¹⁴⁷ He added that there remained a need to continuously remind those in power of the importance of the ongoing Problematique and that CACOR with its past, its mandate and its membership was "as well poised as anyone" to provide that service in Canada.¹⁴⁸ However the days of having the ear of government officials and of being able to use contacts to secure substantial funding for CACOR and COR initiatives had passed. In the post-1988 era, the Club of Rome and its Canadian Association had to operate on a smaller scale and in a different manner than it had in the twenty-year period discussed in this dissertation.

Conclusion

¹⁴⁵ Canadian Human Rights Foundation, *History of CHRF*, <http://www.chrf.ca/english/about/about.php>, (accessed 10 May 2005).

¹⁴⁶ Solem, "Letter to Hammond," p.1.

¹⁴⁷ Solem, "Letter to Hammond," p.1.

¹⁴⁸ Solem, "Letter to Hammond," p.1.

The greatest time of influence enjoyed by COR/CACOR, and the time when holistic systems ideas were most prominent within federal bureaucratic circles, coincided with Michael Pitfield's initial tenure as Clerk of the Privy Council Office from 1975 to 1979. Personal relations played an important role in the dissemination of ideas. Pitfield was "a friend and close policy ally of Mr. Trudeau," and he also established an ongoing dialogue with COR/CACOR member Rennie Whitehead.¹⁴⁹ With the departure of Prime Minister Trudeau and Michael Pitfield from public life, two major COR/CACOR conduits of influence disappeared and were not replaced.

Problems associated with losing key personal contacts within the federal civil service were amplified by the change of bureaucratic attitudes towards public policy development. The end of the Trudeau era also witnessed the emergence of monetarist economic philosophy that eschewed any interference with the dictates of free market. Political scientist Philip Resnick observed that the movement that spread of free market policy doctrine from the United Kingdom and the United States had "not left Canada unscarred."¹⁵⁰ It certainly also scarred both the COR and CACOR. The supplanting of ideas about the positivist state with the ability to help shape the future by an ideology professing the need for a minimalist state to allow market forces to dictate the future was highly detrimental to the Club of Rome's, and its Canadian Association's influence at the federal level.

¹⁴⁹ Journalist Wayne Cheveldayoff wrote that there was "much in common between Mr. Pitfield and the Prime Minister he advises. Both had upbringings in wealthy, Montreal families, both are bilingual and both share a brilliance in intellectual battles."

David Humphreys, "Tory Aides Ready to Hand Clark The Reins: Talent Hunt, Inner Cabinet Set Out in Day-By-Day Guide," *Globe & Mail*, (9 May 1979), p.1.

Wayne Cheveldayoff, "Friendship with Trudeau is Key to Control Pitfield at Centre of the Ottawa Web," *Globe & Mail*, (26 July 1980), p.1.

Whitehead Interview June 2005.

¹⁵⁰ Resnick, *The Masks*, p.177.

Conclusion: The End of -- and Limits to -- Influence

The last chapter brought to a close the narrative of the Club of Rome (COR), and its Canadian Association's (CACOR) influential presence in Canada from 1968 to circa 1988. That narrative did not present an exhaustive picture of the entire two-decade span in Canada's political history but sufficient evidence from Canada and beyond was collected to show that the COR/CACOR enjoyed a special relationship, and had an influential presence, with Canadian public policy officials while Pierre Trudeau was Prime Minister. The dissertation further demonstrated that in this particular case, there were three key elements that led to the COR achieving an influential presence: like-mindedness, political will and financial clout.

Firstly, COR co-founder Aurelio Peccei and Trudeau were like-minded individuals who attracted other like-minded individuals to them and they also set the tone for their respective organizations. Both men shared common concerns and opinions on the state of the world and the dangerous course that humanity appeared to be on regarding the future sustainability of the planet. In Canada, Trudeau remained consistent in his opinion of the primacy the state as the sentinel of the national public interest. For Trudeau, rational public policy principles were the proper means to controlling and guiding the operations of the free market system. Peccei believed that left unfettered the free market system was not sustainable as it was not possible to have infinite expansion on a finite planet.

Both Peccei and Trudeau were also idea patrons for the use of systems analysis and long-range thinking as the substratum upon which rational public policy was built. It was therefore no surprise to find that the Peccei-dominated COR and the Trudeau-

dominated Canadian bureaucracy often shared common intellectual ground that led to synergistic energies being released.

Closely connected to the first ingredient of like-mindedness was the element of political will. It was through the force of Aurelio Peccei's personal will that the COR was driven. He spent a great deal of his time, energy and fortune on spreading both his own ideas and the ideas of others with whom he strongly concurred to world leaders and policy developers. However, as an unelected person, he was limited in terms of legitimate political power to turn ideas into political realities. In Canada the COR found a Prime Minister, Pierre Trudeau, who had sufficient convictions and political will to try and transform the public decision-making process from the substratum level of basic approaches to policy development. Hence Peccei and Trudeau were primary idea patrons with the convictions, and in the latter's case the political power, to make things happen.

The third key factor in COR's influential presence was that of financial clout. In addition to being the prime intellectual and charismatic force within COR, Peccei was also its key financial backer. That backing enabled the organization to operate in its first sixteen years as "non-organization," that is as a loose collection of similarly concerned renowned individuals who met, developed programs of research, and catalyzed funding for various initiatives without the benefit of established administrative structures or budgets. As an example, in Guelph, it is not likely that the 5000 Days course would have ever become a reality had it not been for the monetary support of Kenneth Hammond. As owner of a multinational corporation, Hammond had the financial reserves to provide

conditional support to the University of Guelph and to insist on directing exactly where his contributions were to be spent.¹

At the Prime Ministerial level, it was Trudeau's financial independence that had enabled him in his formative years to travel the world and become sensitized to the interrelated problems of the world, especially for people in the developing world. Beyond the individual level, Trudeau and his bureaucracy had access to vast public funds that were often used in direct and indirect support of COR/CACOR initiatives and the ideas they promoted.

While like-mindedness, political will, and financial clout were three key elements of influence, they were not sufficient. Without the broad international and Canadian populist movements related to global problems, especially ecological concerns, it is not likely that the COR and its Canadian association would have been able to achieve an influential presence within Canada from 1968 to circa 1988. The COR's and CACOR's diverse membership was united by a common set of concerns known as the Problematique. The Problematique was an aggregate of virtually all the world's problems that COR members such as Peccei believed were interconnected and ultimately threatening to humanity's future on a finite planet.²

Formed in 1974, the Canadian Association for the Club of Rome (CACOR) explained that the Problematique was:

a concept created by the Club of Rome to describe the set of the crucial problems – political, social, economic, technological,

¹ Kenneth Hammond Conversation with Author, March 2005.

² Aurelio Peccei, *One Hundred Pages for the Future*, (New York: Pergamon Press, 1981), p.52.

Clairborne Pell, "The Club of Rome – the New Threshold," *Congressional Record* "Proceedings and Debates of the 93rd Congress, First Session, (Volume 119 No.43, March 20, 1973), p.1.

Alexander King and Bertrand Schneider, *The First Global Revolution: A Report by the Council of The Club of Rome*, (New York: Pantheon Books,1991), p. xviii.

environmental, psychological and cultural - facing humanity. The complexity of the world Problematique lies in the high level of mutual interdependence of all these problems on the one hand, and in the long time it often takes until the impact of action and reaction in this complex system becomes visible.³

The concerns and issues that united the COR membership were not novel. For decades previously writers had been attempting to raise similar concerns with the general public and policy makers. In fact atomic scientist and environmentalist Harrison Brown's 1954 book, *The Challenge of Man's Future* detailed much of what would be included in the Problematique. In the preface of the work, Brown stated that the survival of human civilization was dependent upon society being able to recognize existing problems, anticipate emerging ones, and develop solutions that were to be acceptable to society as a whole. He also believed that humanity had the ability to free itself "from the serious predicament" that was becoming evident. The key, according to Brown, was "an understanding of the relationships between man, his natural environment and his technology."⁴

Introducing themes that were to become integral to the definition of the Problematique, Brown concentrated on the key factors of population growth, impact of industrialization, North-South divide, food supply, energy, depletion of natural resources and possible collapse of modern industrial civilization.⁵ Nearly a decade later another writer, biologist Rachel Carson, piqued public interest in the relationship between

³ -- "World Problematique," *Canadian Association for the Club of Rome Newsletter*, (Summer 2005), p.3.

⁴ Harrison Brown, *The Challenge of Man's Future: An Inquiry Concerning the Condition of Man During the Years that Lie Ahead*, (London: Secker & Warburg, 1954), pp.xi - xii.

⁵ In subsequent years Brown joined the Club of Rome, an organization to which he was an unofficial progenitor.

Brown, *The Challenge*, pp.8-17, pp.50-54, p.61, Chapter III, Chapter IV, Chapter V, and p.254.
Mol Peter Moll, *From Scarcity to Sustainability: Futures Studies and the Environment: the Role of the Club of Rome*, (Frankfurt: Peter Lang, 1991), p.281.

humanity and nature through her seminal work *Silent Spring*. Carson warned that the reckless application of pesticides was not only often counterproductive, but often resulted in unintended consequences that imperilled species beyond the intended targets. Most disconcerting of Carson's scientifically supported hypotheses was that ultimately humans were often directly and indirectly affected by the over-use of pesticides, frequently to their peril.

Building upon Carson's lead, a wide array of publications on humanity's relationship to nature emerged and attracted a significant public following. In addition, several environmental disasters focussed public attention on ecological concerns with two sets of significant consequences. The first was the emergence of groups such as Pollution Probe, and the second was the creation of federal environment departments in the United States and Canada. While the preceding line of events is over-simplified, it gives an impression of the extent to which the general public and policy makers became increasingly aware of the importance of investigating and protecting the interrelationships between humanity and nature. Add into the mix works by individuals such as former Canadian Prime Minister Lester B. Pearson about the moral and economic importance of the Third World to the industrialised world and you have most of the scattered elements of the Problematique.

What the COR achieved was to bring the disparate elements listed in the preceding two paragraphs together in the form of a quest to understand if and how the world's problems were related. Then, in sponsoring a computer-based systems analysis project – *The Limits to Growth* – the COR provided illustrations, through graphs and mundane examples, of a variety of public concerns that had been expressed for a decade

or more. It also appeared to provide scientific sanction to existing ecological concerns and, as the COR was a group of renowned academics, multinational businessmen, Nobel Prize winners and senior civil servants of note, the argument could not be easily dismissed by opponents as left-leaning lunacy.

It is also important that the COR emerged at a time when loosely defined Keynesian ideas about a positive role for the state prevailed in the Canadian bureaucracy and beyond. If one or more of the broad societal conditions listed above had not been active, then it is not likely that the COR/CACOR could have enjoyed any success within Canada.

Of the Persistence of *Limits*

The cartoon below from artist Dan Piraro is a satirical glimpse into a possible future devoid of fossil fuels. Piraro's cartoon image also speaks of the interconnected nature of energy and more basic societal issues, such as transportation, work and leisure. One could easily envision the broader national and international ramifications for present and future society if the fate of Mr and Mrs Fossil Fuel was to be visited upon the masses. It shows that reliance on finite energy supplies goes beyond being an environmental issue and encapsulates a significant part of modern life in the industrialised world, and one that is increasingly important in the developing world. However, the consequences of the developing world striving to achieve the living standards and luxuries of the developed world will only serve to place increasing pressure on a multitude of the earth's finite resources.



Figure 2: Artist Dan Piraro, Used With Permission, September, 2005.⁶

Originally produced in 2004, Piraro’s cartoon continues the themes and warnings that were uttered by the Club of Rome (COR) and subsequently its Canadian Association (CACOR) in the late 1960s, throughout 1970s and into the 1980s. The seeming lack of significant advancement in coming to terms with the finitude of the earth’s resources during those years, in part, contributed to the sense of frustration felt by COR members. The years dragged on and their message of the need to take action to ensure future sustainability was ridiculed and dismissed in the media and academic circles as neo-Malthusian doom mongering. While the persistence of *Limits* would make a fascinating dissertation topic unto itself, the Piraro work illustrates the extent to which the COR message of the need for anticipatory action before a crisis point is reached remains pertinent.

This dissertation explored a time in relatively recent history when similar concerns about the interconnected and finite nature of this planet were coming into

⁶ Dan Pirario, Emails to Author: 22 August 2005, 16 September 2005, and 21 September 2005.

sharper populist focus both internationally and in Canada. An important part of that growing consciousness was the publication in 1972 of *The Limits to Growth*. The report was the renowned or infamous, depending upon one's perspective, and it told a story that could lead to Mr and Mrs Fossil Fuel's doorstep. Subsequent generations of historians may come to describe the Club of Rome as either alarmists or as Cassandra's heirs.⁷

However, the COR was not inherently negative or cynical about humanity and the future. Neither of the COR co-founders, Aurelio Peccei or Alexander King, nor their acquaintances who were invited to join their exclusive group, were pessimists in the late 1960s. The COR was predicated upon a common belief that humanity had the collective ability to shape the future. With sufficient study, dedication, political will and ingenuity it would be possible to chart a flexible course to ensure the Earth's sustainability for future generations. COR members further believed that a relatively small group - maximum number of COR members was to be 100 – could enact substantive attitudinal change towards how policy makers around the world conceptualised issues and solutions. To properly appreciate the complexity and impact of policy decisions a holistic-long-range perspective was required.⁸

⁷ In Greek mythology Cassandra was a prophetesses who had the ability to foresee the future, but because she reneged on a promise to sleep with the god Appolo, she was placed under a curse that meant no one ever believed her prophesies, all of which in time proved correct.

Greece Info, "Cassandra," *Who's Who in Greek Mythology*, <http://www.in2greece.com/english/historymyth/mythology/names/cassandra.htm> (accessed 19 December 2005).

William Smith (editor), "Cassandra," in *Dictionary of Greek and Roman Antiquities Volume 1*, (NL: 1870, <http://www.ancientlibrary.com/smith-bio/0630.html>, accessed 19 December 2005), p.621.

⁸ In a similar manner to how the COR was not an inherently pessimistic organization, *The Limits to Growth* was not an inherently pessimistic publication. It reflected deep concerns about the path being followed by humanity and the ability of the earth to continue to sustain contemporary activities related to growth. That, however, was only part of the broader message being related the by MIT team of researchers. *Limits* was as much an invitation to further inquiry and deeper thinking about consequences of contemporary decisions on subsequent generations as it was about trends and likely difficulties if attitudes and actions did not change. The introduction invited researchers from around the world to join "in understanding and preparing for a period of great transition – the transition from growth to global equilibrium." Unfortunately for the

The COR's hope and belief in humanity's ability to shape the future led it to be a champion of the use of holistic long-range systems analysis as a tool for policy development. As mentioned the first and most powerful exploration of a new approach to global issues was through the *Limits to Growth*. The *Limits* shock wave previously mentioned reached Canada as well. In Ottawa "it created quite a stir" according to key aide to Prime Minister Pierre Trudeau, Ivan Head.⁹ The intellectual disturbance was not caused by the book's message, but rather due to its use of novel computer based technology and its use of holistic systems analysis. The policy approach being advocated by the COR met with an appreciative audience at the apex of Canadian public policy. Prime Minister Pierre Trudeau, some key bureaucrats such as Michael Pitfield, Ivan Head, Rennie Whitehead, Tom de Fayer and some other key political figures such as Senator Maurice Lamontagne and cabinet minister Alistair Gillespie viewed the COR in a favourable light and followed its activities and pronouncements with interest.

In addition to having supporters within key Canadian decision-making structures, the COR benefited from having Senator Maurice Lamontagne as both a COR member and as a critical idea patron. After a short troubled political career as a cabinet minister in Lester Pearson's government, Lamontagne found new political life in the Senate Chamber. He quickly established himself as an intellectual and public policy force. As Chairman of the Special Senate Committee on Science Policy, called the Lamontagne Committee, the senator was provided with a platform from which to explore and promote

Meadows' team and for their main sponsors, the COR, the basic argument that unless things changed, global economic growth would come to an end within a century was sufficiently disturbing and antithetical to establishing attitudes and cherished beliefs that other messages and invitations in the publication failed to register on the populist radar.

Donella H Meadows, Dennis L. Meadows, Jorgen Randers, and William W. Behrens III, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, (Washington: Potomac Associates, 1972), p.29.

⁹ Ivan Head, Conversation with Author, February 2004.

the greater use of systems analysis in the decision-making process. It was also an opportunity to emphasise COR preoccupations with the need for holistic future-minded perspective in the development of public policy. The key output from his chairmanship of the committee was the creation of the Ministry of State for Science and Technology (MOSST).

Once in operation, MOSST provided an important distribution point for Club of Rome publications, including conference proceedings and papers. It also became a conduit through which COR/CACOR-supported initiatives, such as the Foundation for International Training in Toronto, came to fruition. The unofficial and informal MOSST-COR/CACOR partnership was facilitated and nurtured by individuals such as Rennie Whitehead and his assistant John Bradley, who were members of both organizations. It was common interest and common perspective that led to a symbiotic relationship developing between the COR, its Canadian Association (CACOR), and the federal government. The special relationship was especially evident in MOSST but also existed within the Department of the Environment (DOE) where key CACOR individuals held positions of influence. For example, CACOR member and Senior Policy Analyst in the DOE Tom de Fayer was instrumental in securing federal funding to support the publication of two CACOR-sponsored initiatives: *Global 2000: Implications for Canada* and *Canada 2000*, published by Pergamon Press in 1981 and 1984 respectively.¹⁰

¹⁰ Gerald O. Barney, *Global 2000: Implications for Canada*, (Toronto: Pergamon Press, 1981).
Roder D. Voyer and Mark G. Murphy, *Global 2000: Canada A View of Canadian Economic Development Prospects, Resources and the Environment*, (Toronto: Pergamon Press, 1984).

The End of Influence

Both the COR and the CACOR suffered a withering of fervour and influence as time progressed. COR optimism waned, in part, due to a failure of political will on the global geo-political stage to implement strategies to ensure a sustainable future for humanity. Within the organization, as well as within its Canadian counterpart, there were internal failures to implement measures to create a sustainable future. Aurelio Peccei and other COR members became convinced that humanity would not take action until a crisis point was reached. At that point, the ability to take ameliorative actions would be greatly reduced. The longer humanity waited to take action, the more limited its options for action would become.

In 1980 Aurelio Peccei wrote that despite the efforts of the COR, the world condition and willingness to confront the critical issues related to the future had deteriorated. He was no longer confident that ameliorative measures would be enacted in advance of a crisis situation. At the crisis point humanity would be in the disadvantageous position of having to react with a limited capacity for action. Peccei wrote in 1980, that ten years previously

the Club of Rome predicted that bad social management, the wasting of resources, widespread pollution, and rapid overpopulation would eventually strangle our civilization. Few people listened. We now have increasing violence, fewer energy resources, military buildups, more economic difficulties and continuing overpopulation.... Today the world begins more and more to resemble a ricocheting bullet as it careens from disaster to disaster.... I have pretty well given up predicting what will happen unless we act. The Club of Rome now concentrates instead on what may happen if present circumstances prevail.

We are heading for a desperate situation here... When people's basic needs are not being met, there will be increased social tension, more civil and military violence... practically everything will be unmanageable.... If we continue to burn tropical forests down to make

way for highways and settlements, and to cut them down to produce lumber, we will be destroying the very basis of life and food.¹¹

Similarly, the other COR co-founder, Alexander King, said in 1987 that governments were only prepared to implement cosmetic measures, to act as *ad hoc* firefighters charging from crisis to crisis with no real holistic plan of action over the long term. He added that the situation appeared unlikely to change until humanity was forced through a cataclysmic crisis to confront systemic problems of unfettered economic growth on a finite planet with finite resources and finite absorption capacities.¹² *Limits to Growth* project leader Dennis Meadows bluntly said during a 2004 conversation for this dissertation, “Look, we are still rushing towards the limits and nothing is to be done about it until the crisis becomes reality... then it will be too late.”¹³

In Canada, disillusionment for Trudeau and his followers with being able to shape the future was more associated with pragmatic electoral politics than broad geo-political realities. Trudeau accomplished significant social and rights goals in enshrining the Charter of Rights and Freedoms in the 1982 Constitution. However, in terms of

¹¹ Interestingly enough, the 15th October 2005 issue of *New Scientist* had a feature article on concerns over the increasing intensity of deforestation in the Amazon. There are now proposals in the works to build highways into pristine Amazon forests to facilitate settlement, logging and farming. Scientist William Laurance of the Smithsonian Tropical Research Institute has conducted extensive surveys and is issuing warnings that are Pecciesque in tenor. Laurance says that he does not believe the Amazon to be a lost cause, but action needs to be taken soon and tough choices have to be made as “Decisions made in the next decade will profoundly affect the balance between peril and preservation.” Since 1990, Laurance reported cattle production had tripled from 20 million head to 60 million head, land for soya operations doubled from 10 million hectares to 20 million hectares and “Timber cutting has grown exponentially.” In 2000 razing alone, developers raised three million hectares of Amazonian forests mainly to facilitate cattle ranching operations. The current rate of forest destruction “is roughly equivalent to an area the size of New York’s Central Park disappearing every hour, or Belgium being razed and burnt each year.”

Aurelio Peccei, “The Challenge of the ’80s,” in Frank Feather (editor), *Through the ’80s: Thinking Globally, Acting Locally*, (Washington: World Future Society, 1980), pp.430-431.

William Laurance, “Razing Amazonia,” *New Scientist*, (15 October 2005), pp.35-39.

¹² Alexander King, “The Great Transition: Speech Delivered to the Sanford Fleming Foundation 5 June 1987,” (Waterloo: Sanford Fleming Foundation, University of Waterloo, 1987).

¹³ Dennis Meadows, Conversation with Author, January 2004.

economics, the Trudeau era had its difficulties. A series of energy shocks led to strong inflationary pressures affecting the economy. At the same time unemployment levels also rose. The new phenomenon was termed “stagflation”; it meant economic stagnation amidst high inflation.

The traditional approach to macro-economic policy broadly followed the suggestion of famous British economist from the early twentieth century, Lord Keynes. Yet stagflation (period of high inflation and high unemployment) was not possible within the Keynesian system. The economic problems of the 1970s severely harmed Trudeau’s popularity. They also watered the seeds of a new macro-economic approach to policy development that, in lieu of a strong government presence, popularly preached the virtues of reliance on free market forces as arbitrators of public policy. A devotion to market-based instruments to determine public policy implied the freeing of capital and fostered a belief that markets were the solution to any policy problem needing to be addressed. The belief in unfettered economic growth as a cure for the world’s ills was antithetical to the core COR message that infinite growth was not possible on a finite planet and unfettered growth was inherently unsustainable for future generations.

In Canada, the clash of philosophic approaches to policy development meant market-sceptics such as the CACOR/COR were supplanted and submerged.¹⁴ However, by the mid-to-late 1980s the dark clouds over COR and CACOR were not all due to paradigm shifts in the world of political philosophy. The organizations also faced serious

¹⁴ Right wing ideas emanating from groups such as the Fraser Institute and the C.D. Howe Institute came to popular prominence. The case of the latter illustrates how far popular opinion shifted in Canada over a brief three-decade span of time. C.D. Howe President Robert Fowler played a critical role in the establishment and early running of the Canadian Association for the Club of Rome in 1974. However, three decades later his Institute disavowed any knowledge of Fowler’s CACOR involvement and argued that the C.D. Howe Institute had always opposed ideas such as the ones presented by the Club of Rome.

internal problems. Problems such as funding, internal divisions, lack of an heir-apparent were largely masked while COR co-founder, president and unquestioned leader Aurelio Peccei was alive. In March of 1984, Peccei's unexpected death sent both COR and CACOR into crisis. The COR decided to continue, but to do so, it had to sacrifice some of its informal operations. Peccei had often used his personal wealth, and his personal secretaries, to cover many COR administrative costs and logistics. He also was able to use his vast charismatic powers of persuasion to convince other persons of influence to support COR initiatives and meetings. For the COR, Peccei was simply irreplaceable. Alexander King assumed the COR Presidency, but the COR's spark and brilliance were interred with Peccei.

Meanwhile Peccei's death also had profound implications in Canada, where CACOR issues with membership, program of work and financing came to the fore and threatened to tear the group asunder. A combination of budgetary changes within government and elsewhere and a lack of sustained contact with a changing federal bureaucracy meant the in direct support of CACOR activities, such as travel funding, were reduced. The result was the contraction of the organization. By the late 1980s, the CACOR had become predominantly an Ottawa-based discussion group. There were still significant activities by individual members outside Ottawa, but in general the organization stagnated in Canada's national capital.

Former science advisor to successive Environment Ministers Keith Ronald said that once Trudeau left office, the COR/CACOR lost its clout within the federal bureaucracy.¹⁵ A further CACOR problem was the fact that new contacts were not made within the federal civil service to replace contacts lost through deaths and retirements. In

¹⁵ Keith Ronald, Conversation with Author, April 2005.

1988 Alexander King announced he was stepping down as COR President and the then CACOR President said in a letter to Hammond that CACOR had been forced to retrench and was shifting operations to essentially ride the coattails of individual members involved in initiatives deemed appropriate to furthering study in and finding solutions to, the Problematique. For both organizations the curtain had fallen. The respective stories of COR and CACOR after 1988 would be of a new era and new challenges and are beyond the scope of this dissertation.

The Limits to Influence

The limits of influence were, ultimately, two-fold: time and circumstance. Time aged the COR/CACOR members and their bureaucratic contacts. Retirements, ill health and death meant a loss of key COR/CACOR contacts. COR/CACOR bureaucratic contacts were not replenished. In addition key COR/CACOR concerns such as systems analysis, computer-based modelling and interconnected global issues were exotic cutting-edge ideas in the early years of this study. By the mid-1980s, such concepts and tools had become mundane and/or discredited in popular and bureaucratic cultures.

Time also witnessed a political intellectual paradigm shift that fundamentally altered the circumstances that had enabled COR/CACOR to develop an influential presence. A shift in political ideology tore asunder COR/ CACOR admonitions to acknowledge the limits of physical economic expansion on a finite planet and to maintain a holistic long-range perspective in policy development. Such ideas may have appeared cogent during an era when Keynesian economics, in both their pure and watered-down manifestations, were respected. However by the market-driven mid-to late 1980s and

afterwards such ideas were antithetical to a new monetarist doctrine that preached of the virtual infallibility of the capitalist free-market system. The limits to influence had come.

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