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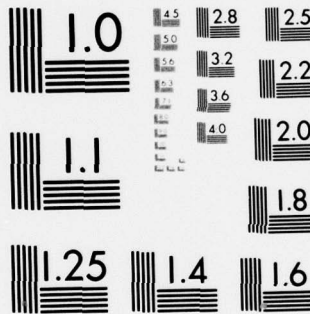
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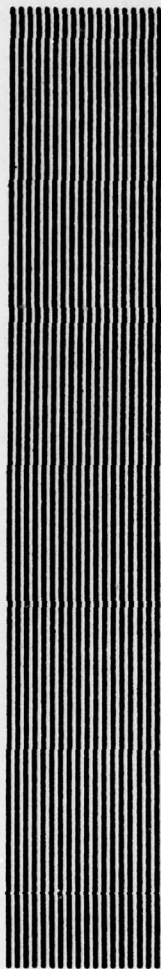
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**SHAPING THE FUTURE:
CANADA IN THE GLOBAL SOCIETY.
AN ASSESSMENT**

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ORAE MEMORANDUM NO. M93

ORAE

**OPERATIONAL RESEARCH AND ANALYSIS ESTABLISHMENT
DEPARTMENT OF NATIONAL DEFENCE**

OTTAWA, CANADA

SEPTEMBER 1978

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DEPARTMENT OF NATIONAL DEFENCE
CANADA
OPERATIONAL RESEARCH AND ANALYSIS ESTABLISHMENT

ORAE MEMORANDUM No. M93

6) SHAPING THE FUTURE
CANADA IN THE GLOBAL SOCIETY
AN ASSESSMENT

by

10) Dr. Erik Solem

14) ORAE-M93

11) Sep 78

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12) 22 p.

OTTAWA, CANADA

SEPTEMBER, 1978

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ABSTRACT

✓ The objective of SHAPING THE FUTURE, III was "to raise the awareness of Canadians concerning the future, make available the most reliable information, share futures' insights and value concerns, seek to identify the action implications and, in general, inform, interest and excite Canadians about the challenges of the 1980's and beyond".

This paper assesses the importance of the conference while attempting to determine to what extent the objective was met. ↗

RESUME

PREPARER L'AVENIR, III, avait pour but de sensibiliser les Canadiens aux problèmes de l'avenir, de mettre à leur portée les informations les plus dignes de foi, de leur faire entrevoir des conceptions et des valeurs dont dépendra l'avenir, de chercher à définir les conséquences implicites des décisions prises et, en général, d'informer, d'intéresser et d'inciter les Canadiens à relever les défis des années 1980 et de celles qui les suivront.

Cet exposé évalue l'importance de cette conférence tout en cherchant à préciser dans quelle mesure elle a atteint ses objectifs.

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PREFACE

This memorandum is based on my report on the conference SHAPING THE FUTURE: CANADA IN THE GLOBAL SOCIETY, Ottawa, August 23-27, 1978. A revised version will be published by FUTURES (IPC Press, U.K.).

In preparing the paper I have benefited greatly from discussions with Mr Don Kaye, as well as from his critical comments.

Annexes A and B are from Aurelio Peccei's Mankind at the Crossroads, opening address at the Club of Rome's 10th Anniversary Meeting - Rome, Academy of Lincei, 13 July 1978, made available during the Ottawa Conference.

The paper is issued under project 96125, 'Strategic Issues of Canadian National Security Interest'.

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'SHAPING THE FUTURE: CANADA IN THE GLOBAL SOCIETY',
AN ASSESSMENT

BACKGROUND

1. The Conference, and subsequent fair, entitled SHAPING THE FUTURE: CANADA IN THE GLOBAL SOCIETY took place at the University of Ottawa campus August 23-27, 1978. The organizing agencies were: Canadian Association for Futures Studies, Canadian Association for the Club of Rome, Centre for Policy and Management Studies (University of Ottawa), Economic Council of Canada, Institute for Research on Public Policy, and Science Council of Canada. In addition, assistance was given by the University of Ottawa and the Ministry of State for Science and Technology.

2. There were some 1100 participants in the conference from government, business, academic and other walks of life. Approximately 3500 persons attended the subsequent Futures Fair.

3. A slight problem may be caused by the misnomer inherent in the conference title, i.e. Shaping the Future ---. The future is not something concrete 'out there', to be shaped as it were. It is, however, partly an intrinsic element in viewing time, past, present and future. There is, of course, in the social sense of time, an assumption that the past is unalterable and that the future is more or less completely unknowable. This assumption was very much under attack during the few days of the Ottawa conference, and very little remained of it as the gathering drew to a close.

4. A final note on the notion of time. In reality, both nations and individuals possess the ability to revise and reinterpret their past history and experiences. Very much in the same way as memory reshapes the biographic past, so our selective perception screens the present and future. Hence in the process of rearranging, reselecting and realigning past events and impressions, we can -- and to some extent do -- alter the past as well as the future. In this sense we are in fact capable of influencing, without actually shaping, the future.*

5. The title goes back to two previous conferences, both of them large and successful, held under the auspices of the Canadian Association for Futures Studies. It probably means that by now this particular title has achieved the status of a trademark and will be with us as long as these conferences continue.

FORMAT AND FINDINGS

6. My minor epistemological criticism aside, this particular conference was in a sense remarkable for its directness and vitality. No 'solutions' were found, but none were promised or expected. There was very little crystal-ball gazing, but a deep concern with the present and its bearing on the future. There was no feeling that 1984 is almost here. Instead, throughout the conference stress was put on the democratic framework without which no future solutions or

* Good writing exists in the futures literature on the concept of time. See f.ex. Toulmin, Stephen, 'The Problem of the Time Barrier', in The Listener, 97 (January 21, 1965), and McHale, John, 'Time and the Future Sense' in Technological Forecasting and Social Change, 12, 1-12 (1978).

resolutions are to be arrived at. Although there seemed at times to be a hunger for realizable alternatives, both the 'pseudo-visionary' -- and the over-rational approach -- were rejected. There was, at times, a pronounced anti-bureaucratic flavour to much of the discussion. This was neither an optimistic nor a pessimistic conference, but in a sense an 'even' one. There was deep concern with freedom, but a freedom measured by restraint so as to fit our distinctly pluralistic context. Hence, it was very much a Canadian conference, despite some big international names, reflecting the way we are as a people.

7. Shaping the Future: Canada in the Global Society was very well organized. It was also a differently organized conference in the sense that seemingly no effort was spared to assure maximum interaction among the participants as well as optimum feedback from the general audience as well as different panels. The major sessions were recorded both on audio and video tapes, with audio tapes available for purchase throughout the conference. An attempt was made to monitor the discussions which took place in the, often spontaneously created, workshops following each of the 'five streamed sessions'. These streams were: 1) Culture, Society and the Individual; 2) Governance; 3) Science and Technology; 4) Business and Labour; and 5) The Economy.

8. In addition to the five parallel sessions divided into three consecutive sections each, there were five 'integrative sessions' dealing with the following subjects:

- Communicating in the Global Village
- Small is Beautiful?
- Changing Rhythms of Work and Leisure
- The Difference of Man and the Difference it Makes
- Technology, Nature and the Limits to Satisfaction

9. Spontaneous discussion groups and workshops were formed throughout the conference, depending on the interests and concerns of the conference delegates and what had (or had not) transpired in earlier sessions. The conference chairman was Senator Maurice Lamontagne, a protagonist of futures work in Canada. The keynote address by Aurelio Peccei, Founder and Chairman, the Club of Rome, was considerably more sombre and pessimistic than the conference 'conclusions' as such. Several eminent speakers took part, too many to be mentioned here. The major statements by, inter alia, M. Paul Gérin-Lajoie, President of Groupe Gérin-Lajoie and former head of CIDA (Canadian International Development Agency) and Professor Eduard Pestel were very thought-provoking for the central themes of the conference and triggered considerable debate and exchange of ideas, not all of them in agreement with the authors.

10. Dr. Sam Nilsson of the International Federation of Institutes of Applied Studies, Stockholm, Sweden and Professor Walter Baker, Director of the Centre for Policy and Management Studies, Ottawa University, and somewhat of a dynamo behind the implementation of the conference, presented concluding speeches.

11. The conference was followed by an interesting and wide-ranging Futures Fair, including exhibits, demonstrations, films, lectures, panels, discussion groups, and entertainment -- all geared towards and dealing with the future. Fifty individual volunteers had been active throughout the conference, and 150 volunteers were at work throughout the fair.

THE VISIONARY VS. PRAGMATIC APPROACH

12. About 1000 man hours had been put into the preparatory work for the five 'streams'. Virtually no effort was spared to guarantee feedback and assure exchange and (where possible) interpenetration of ideas, as well as to record, monitor and disseminate these ideas. What transpired at the other end?

13. As I stated at the outset, no 'solutions' were produced. Furthermore, since there were so many participants from a truly wide variety of interest groups, some of the conclusions may have seemed contradictory. This, I suspect, would only be natural. However, the conceptual framework for arriving at optimal solutions for individual problems was discussed thoroughly, with considerable agreement arrived at.

14. The main conclusion of Panel 1, Culture, Society and the Individual was that whereas technology now enables us to confront directly one or more different cultures, there is a large price to be paid (by whom?). Cultural and social changes may be taking place in a too rapid and uncontrollable manner, it was felt, with the result that social and cultural fabric can -- and will increasingly -- be torn apart, often violently and without seeming justification or some sort of compensatory development. I wonder, should (and could) culture be made subject to 'control'? This is a somewhat dubious, possibly dangerous trend.

15. There was the fear of a simultaneous threat of a gigantic monoculture as well as cultural zoos. Mega scale migrations of people were foreseen for the future, with what that entails. The latter seems to me to be somewhat dubious and rather unlikely, until such time as we see the demise of the nation state, at which point I will go along with the claim.

16. Culture must, therefore, be based both on respect of the family as a basic social unit, as well as equipped with some of the appendants of democracy. The latter may indeed be necessary, but it is much easier said than done. Now, the family as a continuing social unit is almost dead (it remains in monarchies and in the ruling elites of LDCs) - the group of parents and children is now merely a temporary grouping. To the extent that

we feel there was something in family continuity we have to reconstruct the family rather than merely respect it.

17. The Governance panel dealt more with process than structure. As Aurelio Peccei had reminded us, there are deep structural problems in existence in a period of rapid and extreme change. Whereas most problems cut across disciplines, hence are horizontal, nearly all our institutions presently operate in a vertical fashion. This main problem is compounded by the existence, we were told, of an enormous bureaucratic inertia within which the only change thought possible is one of continuous growth without the seemingly necessary safeguards. This conclusion strikes me as being over-simplified. 'Bureaucratic inertia', it seems to me, is often much more likely to preserve safeguards than to encourage growth in general. The exception to this may be the special case of environmental safeguards which have not previously existed.

18. Simultaneously, so-called sub-optimization by interest groups over-complicates both the structures and process of government, it was concluded. How can this paradox be solved? References were made to the 'tragedy of the commons'. It was felt that the present institutional structure is too rigid, etc, hence provides little or no feedback to decisionmakers for whom it is intended. I find this claim spurious. Whose institutional framework is too rigid? Ours provides too much feedback (although possibly not the right kind) with almost constant systems overload! The signals may get through, but often too late. There is too frequently a preoccupation with short term measures. This, I suppose is stuff one has heard before, but important enough to be re-emphasized. What is somewhat new, and was effectively put forward by one discussant (Gordon Smith), is the rather alarming trend of people losing faith in decisionmakers, decisionmaking and -- possibly in the final analysis -- democracy itself. To this, I suppose, one could add the trend of decisionmakers losing

faith in themselves. It seems to me that most people still want decisionmakers to decide for them, although they would like to be able to change decisionmakers who fail to make acceptable decisions.

19. What is required here is the need for the best available methodological (conceptual) tools as aids to decisionmaking, rather than as substitutes for it, and a large ongoing educational process for the purpose of general enlightenment and safeguarding democracy. The situation may seem perilous to some, for example, in the U.S. close to 50 percent of the population does not understand how the modern society works, even in very basic terms. This figure, by the way, seems quite low to me and may, I should think, in fact be considered quite encouraging by most countries.

20. The Science and Technology panel addressed itself to the question of how 'know how' could be turned into 'know why'. We were told that due to the scientific and technological break-throughs of our age practically unlimited confidence in technological solutions has been the result. This, then, has led to an increasing reliance on the technological fix as a cure for all problems. To me this seems curiously out-of-date. There must be very few people with 'unlimited confidence in technological solutions' these days, it is a 19th century concept which has been losing ground through most of the 20th century. If anything, we seem to be moving in the opposite direction.

21. The panel had concluded that there has been an enormous waste of talents and resources due to unnecessary duplication, increasing global resources for armaments, etc. This waste exists, but it is no longer due to unnecessary duplications (except perhaps for certain types of bureaucracies engaged in redundant types of co-ordinating and/or supervisory activity) or increasing global resources for armaments. Both are diminishing particularly in respect of scientific and technological

input. If there is a waste, it is because we don't know how to employ these resources.

22. In a period of declining economic growth and increasing unemployment the question of beneficial or harmful effects of automation is frequently posed, and it was discussed at this conference. If Sweden is anything to go by, and it often is in these types of things, we may be faced with a real dilemma. Some 140,000 jobs (of a population base of 8-9 million) have been lost to automation, some 80,000 of them since 1975. Hence it was felt that additional criteria for choices must be developed. A series of new, often contradictory demands are often put forward. Should production be taxed, rather than wages, for example? Strong opinions exist on both sides of these arguments, and for obvious reasons.

23. Now, it is true that jobs are being lost to automation, often jobs which could be better done unautomated. This does not seem to be adequately recognized; I therefore suggest that what is needed is more knowledge of what is happening rather than more criteria for choices. It may be impossible to stop the advance of science and technology or even to slow it down very much, as was suggested. But it is possible to make decisions on how they should be applied and thus influence societal development.

24. The Business and Labour stream was, for various reasons, thought to be perhaps somewhat parochial. Here the feeling was very much that it will be 'business as normal'. It was perhaps felt a little too much that the problems facing us are cyclical rather than structural. My own hunch is that they are both, and I personally disagree with the relatively low assessment of this particular stream, which I felt was both useful and interesting.

25. We were reminded that in the U.S. since 1970, 60 percent of all new jobs have gone to women. This, of course, changes both the structure of jobs (for women) as well as the character of the family. In the U.S. transfer payment has increased from 24 percent in 1967 to 45 percent in 1977. Furthermore, people resist retirement. New and increasingly different questions are being asked, e.g. 'Is this job self-fulfilling?' There are new psycho-social changes towards jobs, their character is changing drastically and they may, as a commodity, be getting scarce. Leisure society is with us, yet we are still very much living with the old work ethic. If, by the year 2000, only 2 percent of the work force will be in the industrial sector, what does this imply?

26. In Scandinavia the percentage of population engaged in agriculture has decreased from 50 percent in 1928 to 5 percent in 1978. How much further should (or will) this go? Are these trends universal? If so, how or when should they be stopped? Should we have a job strategy or transfer of payment strategy? Are any of these notions in fact feasible and if so, how should they be implemented?

27. There were obviously more questions asked than answered. Some preliminary conclusions: Automation is on, Protectionism will not work. Some admiration was expressed for the Japanese approach of carefully scanning the world to get the most appropriate partner(s) among the LDCs for joint ventures. Another conclusion: The time is now up for labour, management and government to agree on the basic criteria concerning how to get to grips with the above issues and to resolve them satisfactorily for all concerned. There can be little quarrel with this claim. As to how that should be done, the panels did not provide much help in letting us know.

28. From the Economy stream emerged the conclusions that the economy is indeed man-made and that there are certain preconditions which must be met for it to function properly now as well as in the future. There were, not surprisingly, such things as the will of populations to work hard, the utilization of appropriate know-how, the assurance of a sound process of investment, as well as a set of political, economic and social institutions to sustain the will and desire to work, etc. These are, in a sense, 'motherhood' issues.

29. The long process of sustained growth in non LDCs was discussed. Also, would the world's resource base and infrastructure permit growth of this type? It was felt that the question of 'natural levels' cannot be asked. Likewise the 'closing the gap' theory was considered faulty. LDCs need their own plan and strategies, and not something superimposed from outside. Their role in the world economy is a major problem (see Annexes A and B). How does one persuade nations whose natural instincts are directed towards competition and dominance to accept a predetermined 'just' share? Furthermore, economic arguments are no longer enough by themselves (by now a truism). Totally new arguments are needed. These must be based on concepts of interdependence. Neither Marx nor Keynes work any more.

CONCLUDING REMARKS

30. And so the conference drew to a close. On the one hand I feel it could have been a good deal more speculative and daring. On the other, it was a useful conference with a certain amount of realizable potential for follow-up and possible implementation. It certainly was a practical learning experience on a grand scale. This in itself was quite an achievement.

31. The conference proper was followed by a Futures Fair, which lasted through the weekend. The arrangers had perceived, and quite correctly, that this would be a natural continuation of the conference. There were displays and demonstrations, ranging from alternative energy sources and electric cars, biofeedback, natural foodstuffs, a time capsule, audio-visual displays and a series of very interesting workshops and lectures. Several thousand visitors attended this unusual event. The quality of the workshops and lectures was good and the level of questioning and discussion at times intense and quite high. A slight puzzle perhaps was the pattern of attendance for lectures and workshops. I attended a seminar arranged by the Coalition of Nuclear Responsibility (a Canadian anti-nuclear pressure group of sorts) entitled '20,000 Years into the Future', which I found to be very interesting and surprisingly objective. There were only half a dozen persons present! Other events drew huge audiences, including a special workshop on Future Concepts of Space, Time and Image (which I happened to be chairing), with around some 250 persons taking part.

32. It was also evidenced from the large turnout for U.S. LCol (Ret) Bearden's seminars on psychotronic weapons that there is a growing interest in conflict and security issues among futurists. Why it is that much of the Futures literature does as yet not reflect this fact, is a question to which we will address ourselves in a forthcoming paper.*

* See Futures Studies and Conflict: Reflections on Dror, by G.D. Kaye and K.E. Solem, ORAE Memorandum No. M95, 1978.

THE WORLD'S POOR, 1976

IN TOTAL WORLD POPULATION OF 4 BILLION

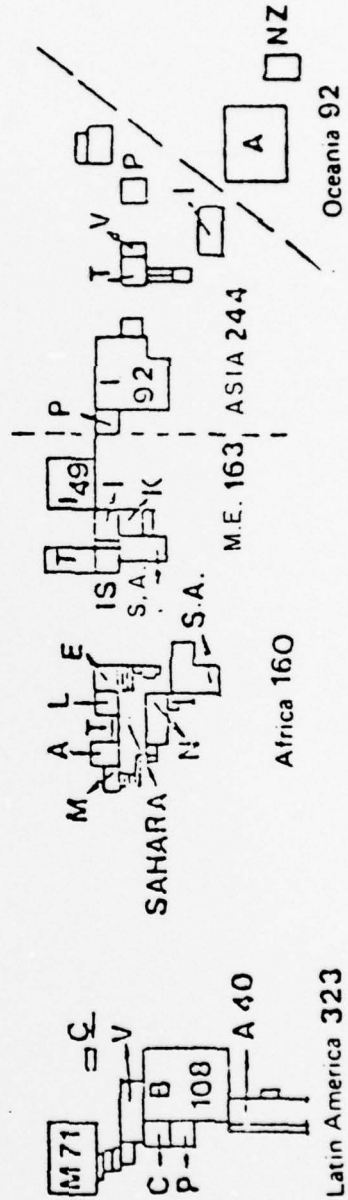
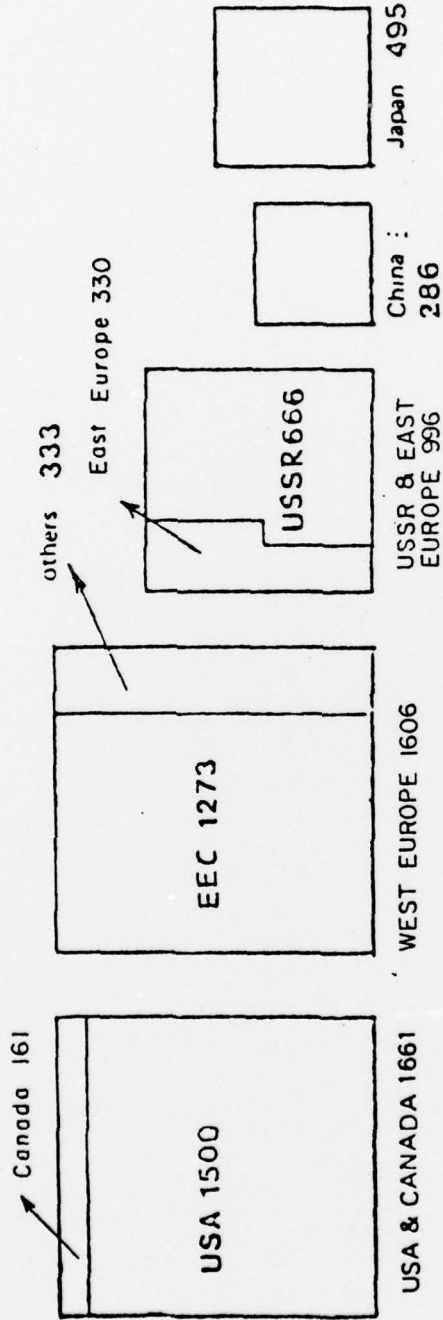
UNDERNOURISHED (i.e. Below suggested Calorie/Protein Levels)	570 million
ILLITERATE ADULTS	800 million
CHILDREN NOT ENROLLED IN SCHOOL	250 million
NO ACCESS TO EFFECTIVE MEDICAL CARE	1,500 million
LESS THAN \$90 INCOME PER YEAR	1,300 million
LIFE EXPECTANCY BELOW 60 YEARS	1,700 million
INADEQUATE HOUSING	1,030 million

Source:
 Center for Integrative Studies
 University of Houston

ANNEX B

THE 5 POWERS OF THE NORTH AND THE 114 COUNTRIES OF THE SOUTH

Surfaces are proportional to 1975
Gross National Product
in thousand million dollars
according to World Bank



Source:
Maurice Guernier
The Club of Rome

ANNEX C

CONFERENCE PROGRAM*

A. OPENING PLENARY SESSION and Keynote.
"Shaping the Future: Canada in the Global Society"

B. THEME CONFERENCE SESSIONS

I. CULTURE, SOCIETY, AND THE INDIVIDUAL

CSI-1 Diversity and Integrity in Canada's Future. Cultural diversity and social cohesion: Searching for Balance

CSI-2 The Many Images of Man. The "human-first" issues: what is happening to man and his understanding of himself?

CSI-3 Responsibility and Response-Ability. Individual responsibility, the human and institutional constraints to moral initiative.

II. GOVERNANCE

G-1 Governing Canada: the Challenge of the Global Society. Issues of Canadian governance in their global context, and Canada's responsibility in relation to world government.

G-2 The Limits to Effective Governing. The formidable problems of the already-foreseeable limits to man's ability to govern modern societies, and available alternatives for extending these limits.

G-3 Distributing the Power to Govern. The viable alternatives to discharging the functions of governance and distributing the power to govern.

III. SCIENCE AND TECHNOLOGY

ST-1 Science, Technology and Social Choice. Progress as shaped by the internal logic and imperatives of scientific and technological development in relation to the issues of individual and social change.

ST-2 The Coming Shape of Human Settlements. Speculation upon changes of urban form and population distribution as determined, for example, by energy constraints, life-style preferences, communications' technologies, and ecological relationships

ST-3 Democracy in the Knowledge Society. The immensely increased power for developing and handling knowledge, and the implications for preserving and advancing democratic values.

C. INTEGRATIVE SESSIONS (concurrent), covering issues crossing all theme areas

IS-1 Communicating in the Global Village. The many dimensions of communicating in a world growing increasingly interdependent, and their relevance to individual and social well-being

IS-2 Small is Beautiful? Are quality and efficiency essentially related to size? Is small necessarily more beautiful, and large more economical? Under what conditions, regarding both large and small, can we balance quality and efficiency?

IV BUSINESS AND LABOUR

BL-1 The Future of the Market Enterprise System. The extent to which the market enterprise system can accommodate the broader economic and social goals of society

BL-2 Business, Government, and Labour Interactions: Issues for the 1980's. The prospects for establishing appropriate and effective advisory and consultative mechanisms

BL-3 Productivity: Changing Concepts. What does a job produce? for labour, management, the individual and society?

V THE ECONOMY

Ec-1 Managing the Canadian Economy in a Global Perspective. Constraints and opportunities for economic growth: considerations of domestic resource availabilities and attitudes towards their use, interactions among major industrial nations, "third world" well-being

Ec-2 Economic Growth: Master or Servant? Growth both as "means" and as an impediment to the fulfillment of human needs and aspirations

Ec-3 Government Participation in the Economy. The intentions and effects of public policies and regulations on economic productivity

IS-5 Technology, Nature and the Limits of Satisfaction. Are the "limits to satisfaction" of human needs capable of unlimited expansion, readily keeping pace with scientific and technological advances? Is it, indeed, basic needs at issue, or merely "contrived" ones? What is the impact on nature of the process, "expanding technology/expanding limits of satisfaction"?

THE FUTURES' FAIR

There will be a futures' fair, open to all Conference participants and the general public, taking place Saturday August 25 and Sunday August 26. Focussing on the quality of life and the future, it will have six components: exhibits, demonstrations, discussion groups, audio-visual displays, craft and merchandise booths, and folk entertainment.

FUTURES' WEEK

The week of the Conference and Fair has become a Futures' Week, in light of the several futures' events taking place throughout the week. A separate bulletin on the Futures' Fair and Futures' Week is available.

IS-3 The Changing Rhythms of Work and Leisure. What is happening to the world of work and the work ethic itself in Canada? Is the Greek leisure society just around the corner and, if so (or not), what are the implications?

IS-4 The Difference of Man — and the Difference It Makes. The issue of the limits to man's rationality, man/animal/machine comparisons, and the implications for "managing" man's future.

DETAILS CONCERNING SESSIONS, CHAIRMEN, SPEAKERS AND DISCUSSANTS

SHAPING the FUTURE: CANADA in the GLOBAL SOCIETY

TYPE OF SESSION	DAY & TIME	SESSION CONTENT				
Plenary Session	Wednesday August 23 7:30-9:30 pm	1 Formal Conference Opening — Chairman: Senator Maurice Lamontagne 2 Keynote Address: "Shaping the Future: Canada in the Global Society" by Aurelio Peccei, Founder & Chairman, Club of Rome 3 Response by: Michael Small, Ottawa "A Youth Perspective on the Future"				
Theme Conference Sessions		Culture, Society & the Individual Chairman: Therèse Lavoie-Roux, M.N.A., Québec	Governance Chairman: Lucien Lamoureux, Ambassador to Belgium	Science & Technology Chairman: Leon Katz, Science Council Secretariat, Saskatchewan	Business & Labour Chairman: Michael Kirby, President, Institute for Research on Public Policy	The Economy Chairman: Sylvia Ostry, Chairman of the Economic Council
	Thursday August 24 9 am — 12:30	CSI-1 Diversity & Integrity in Canada's Future Speakers: Judith Vaillancourt, University of Montreal; Hugh Brody, Scott Polar Research Institute, Cambridge; Earl Shorris, Contributing Editor, Harper's Magazine.	G-1 Governing Canada: The Challenge of the Global Society Speaker: Paul Gérin-Lajoie, Président, Groupe Gerin-Lajoie Discussants: John W. Holmes, Canadian Institute of International Affairs; John Sigler, Norman Patterson School of International Affairs	ST-1 Science, Technology & Social Choice Speaker: Joseph Coates, U.S. Congress, Office of Technological Assessment Discussants: Byron Wall, University of Toronto; David Bates, University of British Columbia	BL-1 The Future of the Market Enterprise System Speakers: William Dimma, President, Torstar Corporation; R.B. Bryce, Former Deputy Minister of Finance	Ec-1 The Canadian Economy in a Global Perspective Speaker: David Slater, Director, Economic Council Discussants: Arthur J.R. Smith, Assistant to the President, INCO, Ltd; Robert Joyce, Department of Finance, Canada
	Thursday August 24 2 pm — 5:30	CSI-2 The Many Images of Man Speaker: Gregory Baum, St. Michael's College, Toronto Discussants: Howard Eisenberg, M.D., Rosedale Medical Centre, Toronto; Wilfred Pelletier, Thunder Bay	G-2 The Limits to Effective Governing Speaker: Eduard Pestel, co-author of <i>Mankind at the Turning Point</i> Discussants: Gordon Smith, Privy Council Office; Peter Dobell, Director, Parliamentary Affairs and Foreign Trade	ST-2 The Coming Shape of Human Settlements Speaker: Michel Chevalier, Universities of Montreal and York Discussants: Peter Land, Illinois Institute of Technology; Kirk Foley, President, Urban Transportation Development Corporation	BL-2 Business, Government & Labour Interactions Issues for the 1980's Speakers: John Crispo, University of Toronto; Jack Munro, President, International Woodworkers of America; Paul Leman, Vice-Chairman, Alcan Aluminum	Ec-2 Economic Growth: Master or Servant? Speaker: Ezra Mishan, London School of Economics Discussants: Gilles Paquet, Carleton University; L. Douglas I.oe, Senior Economist, Joint Economic Committee, U.S. Congress
	Friday August 25 9 am — 12:30	CSI-3 Responsibility & Response-Ability Speaker: James Robertson, Management Consultant, London Discussants: Inger Hansen, Privacy Commissioner, Canadian Human Rights Comm; William Dyson, Vanier Institute of the Family	G-3 Distributing the Powers to Govern Speaker: Ronald W. Watts, Principal & Vice Chancellor, Queen's University Discussants: Stanley Roberts, President, Canada-West Foundation; Eric Soem DRAG, Ottawa	ST-3 Democracy in the Knowledge Society Speaker: Roy Megarry, Vice-President, Torstar Corporation Discussants: Michael Marien, Information for Policy Design; New York; Rubin Nelson, Square One Management	BL-3 Productivity: Changing Concepts Speakers: Dorothy Walters, Director, Economic Affairs, INCO, Ltd Eric Trust, Universities of Pennsylvania and York	Ec-3 Government Participation in the Economy Speaker: Almarin Phillips, University of Pennsylvania Discussants: John Langford, York University; Marie-Josée Drouin, Executive Director, The Hudson Institute, Montreal
	Friday August 25 2 pm — 5:30	IS-1 Communicating in the Global Village Chairman: A. Davidson Duntin, Carleton University Speaker: Hugh Kenner, Johns Hopkins University Discussants: Betty Zimmerman, CBC; Donald Evans, University of Toronto	IS-2 Small is Beautiful? Chairman: J. Rennie Whitehead, Chairman, Canadian Assoc. of Education Speakers: George McRobie, Head, Intermediate Technology Development Group, London Justice Thomas R. Berger, Supreme Court of British Columbia	IS-3 Changing Rhythms of Work & Leisure Chairman: Jane Dobell, Chairman, Ottawa Bd. of Education Speaker: David Lewis, O.C., Carleton University Discussants: Francis Breglia, University of Ottawa; Jacques Gagné, Director, Federation of Local Centres of Community Services, Quebec	IS-4 The Difference of Man — & The Difference It Makes Chairman: Theodore F. Geraets, University of Ottawa Speaker: Aristotle Exler, Man-environment Relations Inst., New Jersey Discussants: Jerzy A. Wojciechowski, University of Ottawa; Norman White, McMaster University	IS-5 Technology, Nature & the Limits of Satisfaction Chairman: John Shepherd, Executive Director, Science Council of Canada Speaker: William Leiss, York University Discussants: Vivian Rakoff, Clarke Institute of Psychiatry; Peter Dawson, Tomkins Institute, Newfoundland
Plenary Session	Saturday August 26 9 am — 11 am	Summation of Conference Findings (a) Chairman: Senator Maurice Lamontagne (b) Speakers: Sam Nilsson, International Federation of Institutes of Applied Studies Sweden, World Perspective Walter Baker, University of Ottawa, Canadian Perspective				

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13. ABSTRACT The objective of SHAPING THE FUTURE, III was "to raise the awareness of Canadians concerning the future, make available the most reliable information, share futures' insights and value concerns, seek to identify the action implications and, in general, inform, interest and excite Canadians about the challenges of the 1980's and beyond". This paper assesses the importance of the conference while attempting to determine to what extent the objective was met.		

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KEY WORDS

Futures concepts
Global society
Governance
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