## Science council warns:

## By ROBERT CHODOS THE LAST POST

The concept of national goals has had a rocky history in this country. It was very much in vogue in the era of Sir John A. Macdonald, who put Confederation over on reluctant Maritimers, protected Canadian industries, pushed a line of steel from ocean to ocean and opened up the west as an agricultural hinterland and captive market for the industrial east so that the British imperial idea would have a home in North America and the hated Yankees would be kept

But Sir John A.'s tariff walls could not keep out the Yankee flood-tide, and the British empire eventually had to die anyway; The first Canadian attempt to define a sense of national purpose was foredoomed. It showed flashes of life during the two world wars and also in the 1930's when the government of R.B. Bennett perceived that we needed a national broadcasting system, but these were only brief reverses in what turned out to be a long downhill run.

The nadir was reached in the era of post-World War Two Liberalism, the Great Sellout and the multinational corporation. By the time the ebullient



1950's came around, Canadians thought of the idea of a national purpose as being slightly absurd, if they thought of it at all. There is no room for a system of national goals if the most powerful sectors of a country's industry don't share those goals, if, in fact, they accept no goals except their own.

In recent years, the most influential advocate of the concept was the Science Council of Canada, a crown corporation set up in 1966 by the Pearson government "to assess in a comprehensive manner Canada's scientific and technological resources. Requirements and potentialities." It is a vague enough mandate, even when specified by eight subclauses and the Science Council has chosen to interpret it with a great deal of latitude

The Council's emphasis has been on what is known in the trade as "mission-oriented" research research directed toward a particular practical goal. As a result, the Council's reports have tended to focus not only on research, but also on missions.

Its watershed report was issued in October of 1968 and is called "Toward a National Science Policy for Canada." At the very beginning it states that "before. the Science Council could construct a sound policy for the use and development of science in Canada, it had first to erect a home of reference for this policy. Starting with the axiom that the value of any scientific enterprise to a society is determined by the social, cultural and economic goals that that society seeks, such a framework could be built ...

Thus in the process of defining a science policy, it was necessary to define national goals. So the Council defined six of them: national prosperity; health; education; personal freedom; justice and security for all in a united Canada; increasing availability and better use of leisure time; and world peace. Later it added a seventh: the conservation of the environment.

The goals are innocuous enough and could be shared by everyone from a corporation president (which is what the Council's chairman, Omond Solandt, is) to a Waffler. It was how they were pursued that might lead to disagreements. And predictably, the Council generally tended to avoid the more disquieting consequences contained in the goals it set out.

But not always. In August, the Council issued a report on computer communications which suggested that if national goals were to be met the flow of computerized data must be made to run east-west instead of north-south - into and out of the United States - the situation that is developing now. It compared this to the CPR in the 1880's and the CBC in the 1930's and the report attracted a ripple of attention

Scarcely a month later, in early October, the Council came back with some still more extraordinary suggestions. Eighteen months earlier, it had detected a serious situation developing in the area of Canadian manufacturing and had determined to do some work in that field. Because the co-operation of industry was needed, and since (given the usual habits of industry) the strictest confidentiality had to be maintained, it had undertaken the work itself instead of contracting it out, the Council's usual practice.

Fifty industries, both Canadian and foreign-owned, were chosen, intensive studies were made, interviews were conducted with a whole range of executives

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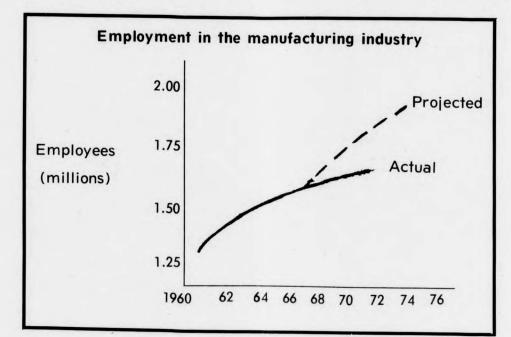
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(both in Canada and at the head offices in the case of the foreign-owned firms). What the Council found was of sufficient urgency for it to reverse another of its usual practices: instead of waiting to release its background studies first and only then publishing its conclusions, the Council decided to issue a report right away.

The report bears the deceptively bland title of "Innovation in a Cold Climate: the Dilemma of Canadian Manufacturing", but there the blandness ends. The report is perfectly blunt about what is happening:

"Between 1961 and 1967 manufacturing employment increased almost 25 percent. In 1968 this growth began to falter and employment has now remained essentially static for the last two years. This development



can be traced to a levelling off (and in many cases a be traced back to the branch-plant nature of the decline) in employment in precisely those industries that contributed most heavily to new employment in the first half of the 60's.'

The glamor industries are not as glamorous as they seemed, in terms of profits, growth, and job opportunities. Employment in the service industries continued to climb at a steady rate; it was only employment in manufacturing that was floundering, with manufacturing that is highly dependent on technology showing up particularly badly on the graphs. Nor does the Council see any sign that this trend is Canadian economy We have an inadequate tech lology base in Canada because of the ease with which technological information flows across the border from the United States. The problem of our relatively small market size is compounded by the fact that we have far too many suppliers — the branch plants of larger foreign companies. Moreover, since the branch plants are backed by strong parents, "it is the indigenous companies that are the first to be squeezed out." We have not developed proper management skills;

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likely to reverse itself. The consequences of its continuance are likely to be severe: "Canada's economy in this decade will increasingly

become dependent on the resource and service industries. Resource industries offer limited opportunities for employment; furthermore, much of their profit does not remain in Canada. This funnelling of funds out of the country is likely to stunt the growth of our service industries.

Our participation in international trade will become less and less significant and we will become - once again — mainly suppliers of raw materials to the North American continent.

The Science Council relates the trend to the inability of Canadian industry to innovate and gives a wide variety of reasons for that failure, most of which can

we have never thought that we needed them. And now we are faced with the hegemony of the multinational corporation, which sets up its "rationalized" subsidiaries in Canada, subsidiaries that conduct no research and development at all or, at best, conduct research and development totally unrelated to the specific needs of the Canadian economy.

The Council calls for the elaboration of a national industrial strategy, without underestimating the obstacles of its implementation. "While formulating industrial policy is the business of governments, its realization through an industrial strategy must be a co-operative enterprise, involving both industry and government. Here there are grounds for concern, for the relationship between industry and government in Canada is by no means good enough to ensure that this co-operation will take place.

"This obstacle to realizing an industrial strategy is the fundamental impediment to successful industry in Canada.

The report adds up to a fundamental, trenchant, nationalist critique of Canada's industrial development - or underdevelopment. It beckons us to resist the place set out for us in the American empire. Implicitly, and sometimes explicitly, it offers us instead, an independent capitalist Canada

And that's where it runs into trouble.

For the Council stops short of telling us how national industrial goals are to be reconciled with the goals of the multinational corporation. It suggests the development of Canadian-based multinational corporations, while admitting that this is "not a universal solution" — the example of Massey-Ferguson should be enough to convince anyone that it is not a solution at all. The report hides behind phrases like "industry, too, needs to set its house in order" and "an industrial consensus is more to be striven for than achieved." It is willing to say that "industry must work to overcome its subsidiary mentality," but not that it must cease to be dominated by subsidiaries.

But even if all this could be overcome, the Science Council's vision would run into other problems. It touches on one of those when it discussed the geographical reasons for Canadian industry's failure to innovate

The Council begins by making some good points about government regional development policies: "Canada's large size and the particular distribution of its population, the geographic location of plants can be of great importance," it says. Geographical problems are compounded by regional development incentives, which make it attractive for industries to set themselves up in places where it may be difficult for them to be competitive. This has the effect of further dividing an already fragmented market and in the long run does not reduce unemployment, but simply moves it from province to province.

"We have nine brands of automatic toasters on the market," says Patrick McTaggart-Cowan, executive director of the Council, "when we could probably support about three. But if you and I wanted to cooperate in setting up another toaster factory in the Atlantic provinces, I'm sure we could get a grant from the Department of Regional Economic Expansion to

Then the report continues: "There is a place for

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small-scale manufacturing in the less-developed provinces, as the success of many companies attests. Manufacturing industry is not, however, the ultimate solution to the development of these areas, since it fails to make use of their inherent advantages. Where manufacturing is clearly not viable, government subsidies should be used to develop resource-based and service employment.'

And there's the problem. For this is not a new approach; it was Sir John A. Macdonald's solution. It differs from the continentalist solution in that instead of turning Canada into a perpetually underdeveloped resource supplier for the United States, it turns some parts of Canada into perpetually underdeveloped resource suppliers for other parts.

But despite the questions it leaves unanswered, the Science Council's report is the most stimulating reading to come out of Ottawa in some time. And still more racy stuff is in the works. The first of the as yet unpublished background studies to the manufacturing report will come out in December; it will discuss the multinational corporation. Two others are dealing with private industry and the other with public policy, are expected in 1972. They will be watched with interest.

