

If Professor Reuber had read our report carefully, he would have seen that our approach to science policy "instead of relying on a single channel, . . . is based on a variety of methods and allows for 'buffers' between the government and the researcher."

Thus, on the five issues raised by Professor Reuber, he agrees with us on three of them. On the two others, he repeats the substance of our views but distorts or ignores them in order to appear to disagree. I am tempted to apply to his memorandum what he said about our report and to conclude "that it is weak in its analysis."

I could go on and point out irrelevant criticisms made by others, but I will mention only an additional one because it concerns the Science Council. A group of biologists said in their response to our report as it appeared in the journal *Science Forum*:

The virtual dismissal of the Science Council as a body operating in a vacuum, out of touch with the realities of the problem of science policy, seems also, to us, an immoderate condemnation.

This is, again I am sorry to say, another distortion of our report. We never said that the council was "out of touch with the realities of the problem of science policy". This is a pure invention. We asserted, however, that the council was operating in a vacuum, but this assertion was based on Dr. Solandt's own admission when he told us: "There is no use in the Science Council making recommendations, if nothing happens." The context in which we made that comment that the council was operating in a vacuum clearly shows, as it appears at page 184, that our criticism was not addressed to the council but to the inefficient government machinery designed to deal with the council's recommendations.

I want, finally, to deal with the accusation that our report is wrong and inaccurate, as Dr. McTaggart-Cowan has asserted, "filled with prejudice" according to Dr. Gunning, that it "is in the nature of special pleading" and that it leads "the general public and all the news media to believe that it represents a fair and objective statement of Canadian science," as Dr. Herzberg has said.

It is not true to say that the committee tried to give the impression that we were presenting a fair and objective statement of Canadian science. As a matter of fact, we said very little of Canadian science in the sense that Dr. Herzberg defines it. According to our terms of reference, our purpose was to study science policy in its broadest sense, not Canadian science. We made this very clear in the first chapter when we said:

The report is not designed to provide a detailed or even a broad picture of the science activities and programs of government departments and agencies. A detailed description of these operations is contained in the committee's proceedings—As to the broader picture, it has been provided by the OECD report on Canada, and that is still valid.

Hon. Mr. Sullivan: That is the basic erroneous idea that was picked up.

Hon. Mr. Lamontagne: Well, it is there at page 15 of our report. Our critics, I assume, did not see this statement.

What we were expected to do and what we did was to consider the development of Canadian science policy, the evolution of the government central machinery for its formulation, the results of that policy as considered in a broad international perspective and as perceived by those Canadians who appeared before us. This was really the essence of our mandate.

I will not argue that the history of science policy in Canada which is presented in Volume I is complete. As a matter of fact, we had to bring a draft of 700 pages to about 100 pages. But, as a broad picture of the different stages of that history, nobody has shown to me yet that our report is not a fair and objective statement. It shows that the main objective assigned to science policy since 1916, which was to promote technological development in industry, has never really been attained, that we have failed during the last five decades to develop an overall science policy and an effective central machinery for the formulation, implementation and evaluation of such a policy, that successive Canadian governments had abdicated their responsibility in this field and that as a result we have had in Canada a hidden policy or a policy by accident. These are the main themes of our historical review, and I challenge anyone to refute these statements. These findings were revelations for many Canadians and that is why at a press conference I described our first volume as a "shock treatment".

We attempted to substantiate these conclusions and their consequences in three ways. First, we considered three programs related to nuclear energy, military aircraft development, and computer technology. A few pure scientists have criticized us for our selectivity and for showing a partial picture of Canadian science. I would remind them that these cases are all related mainly to technology and innovation, not to basic science. We did not even try in our report to appraise the results and the performance of fundamental research in Canada. Perhaps we should have attempted this operation and estimated the number of Canadian prize winners, the number of Nobel prizes that we have in Canada, and estimated the number of articles published by Canadian scientists in internationally renowned journals, and so on. But we did not do that because of the complexity of the operation, and mainly because our mandate was to study science policy in the light of its assigned mission, which was, as I have said before, to help promote technological development in industry.

Within this perspective, basic research may be an important ingredient in the long sequence leading to innovation but it is not the end result of that process and cannot provide a tangible basis for appraising the success or failure of that policy, whose main aim was to promote technological development in industry. Thus, the pure scientists can accuse us of not having attempted to evaluate the quality of their work but not of having presented case studies throwing a bad light on their scientific reputation, because we did not.

Nor would we wish to infer that the work of thousands of Canadian engineers and technologists has not been