

Speech from the Throne

privilege for young or old people in Canada to have a job and some security. This is the one thing that is necessary.

I think I have covered the main points I wish to put before the House. The government of Canada, not only in relation to the grains industry but to other sectors as well, should be spending our money and using our talents to develop this country. If we insist on leaving this to international finance and international industry, our country will be exploited. In all probability, they will not build the kind of Canada that we want. It will be tailored to their needs, objectives and desires. Canadians will then have to do what they can with what remains. They will be left to clean up the mess that has been left behind. We will be ravaging the garbage dumps that these people leave behind for us.

Hon. Alastair Gillespie (Minister of State for Science and Technology): Mr. Speaker, I welcome the opportunity to participate in this debate this afternoon. It is an opportunity to deal with certain measures raised in the Speech from the Throne. I will deal with those shortly.

First, may I say I listened with great interest to the hon. member for Saskatoon-Biggar (Mr. Gleave) as he set forth some of the problems from his vantage point today. His is a vigorous voice, one we have listened to with considerable interest during this Parliament.

I would like to trace the development and emergence of a science policy in Canada. I would like to go back to the sixties for a moment, and take Your Honour and hon. members back with me. The sixties was a decade of quickening change, a decade of tension. For some, it was a decade of fear. These were the years that followed immediately upon Sputnik. These were the years when the young president of the United States said, we will put a man on the moon in ten years. These were the years of nuclear threats and fallout, deterrents and confrontation over Cuba. Yes, they were years of fear of war in Vietnam, of new technologies, napalm and new instruments of death.

They were also years of computers and more automatic ways of doing things, programming and depersonalization as far as the human dimension is concerned. It was a period of rapidly rising consumption, so rapid that our oil consumption doubled in the space of that 10 years. It was a period when our consumption of electrical energy doubled again. It doubled in the 10 years during the fifties and doubled again during the sixties. It was a decade when people started to ask themselves where population growth is taking us. They asked if the resources of this world could support the rapidly growing populations of the world.

These were the years when people talked about pollution, when new words became by-words. I refer to such words as environment and ecology. These are not words that we saw or heard in the fifties. If you read the speeches of hon. members and look at the press reports of the fifties, you only rarely find the kind of preoccupation that we now have as we start the seventies with words and processes like pollution, environment and ecology. This was a period when the drive of man shifted slightly from economic growth at all costs to economic growth and quality of life considerations. These were the sorts of pressures which gave rise to the emergence of science

policy questions. It was these things that the OECD Committee on Science Policy was formed to look at.

I wish to read a paragraph from the last Speech from the Throne. This is reported in *Hansard* for October 8, 1970. This government, recognizing the need for instruments to deal with science policy questions, said:

• (1600)

There exists in Canada a great wealth of untapped and uncoordinated scientific talent and experience not now adequately utilized in the quest for solutions to our modern problems. In order to serve better the industrial and technological sectors of our economy, as well as Canada at large, a programme will be introduced to gather and focus these sometimes divergent and competitive scientific resources. In this respect the government will consider with care measures recommended by the Senate Committee on Science Policy and the Science Council of Canada.

That is an extract from the previous Speech from the Throne. Out of it sprung, as we now know, the government reorganization bill, the bill which created the ministry of state concept. My ministry, the ministry of State for Science and Technology, was the second to be proclaimed following the passage of that reorganization bill. I want to talk about the follow-up of that Speech from the Throne in the time available to me this afternoon. Let me go back to the debate on the organization bill and in particular to the remarks of the President of the Treasury Board (Mr. Drury) when he introduced the proclamation giving effect to the Ministry of State of Science and Technology. He said, and I quote from his speech as reported at page 7166 of *Hansard* for June 21 1971:

It was only in the last decade—the sixties—that countries first began to consider science as a significant factor in national policy and to seek organizational structures to recognize this fact. As members are aware, it was the Royal Commission on Government Organization, the Glassco Commission appointed in 1960, which first made a comprehensive study of this subject in Canada and reported on it in January, 1963. As a consequence, as early as 1964 the government of the day established a science secretariat within the Privy Council Office to provide a focus for policy co-ordination of those matters which had a significant content of science and technology.

About the same time, a major study was made on behalf of OECD by a distinguished group of international consultants headed by Pierre Piganiol, formerly Délégué Général de la Recherche Scientifique of France. The report of this group had a major influence on the creation of science policy bodies in many countries and was consistent with what had already been proposed in Canada.

He went on to say:

With your permission, Mr. Speaker, I would like to refer to a number of important observations in this report of experts. I quote:

A nation needs a comprehensive and consistent policy for the support and advancement of science, because there are more opportunities to advance science and technology than there are resources available to exploit them all. The term "science policy" is ambiguous. It too often connotes only a policy limited to the needs of science per se, and excludes the effects of science and technology on the full spectrum of national policies. Maximum exploitation of scientific opportunities requires programs that combine concern for the growth of science itself and provision for the rapid, deliberate application of its fruits to human welfare. That is the substance of science policy in the full sense, as denoting consideration of the interactions of science with policy in all fields.

Those paragraphs summarize in a few words the essential thrust of science policy and of this government's