

and new kinds of development in this country. This is not idle speculation. We have an example in the United States of a clear indication of what can be done with government science policy.

In the United States, perhaps inadvertently, the science industry, primarily related to defence and to some degree to the space administration, has been spread around the country. It has not been concentrated necessarily in the areas where growth has been concentrated. One result of that, when you compare the population trends in the United States with population trends in Canada, is that you find that in the United States people are moving all over the country and growth is occurring everywhere. Population is growing particularly in the southeastern portion which for so long languished. Population is growing there because the science industry has moved there. If you compare that situation of growth around the country with the situation here, you find that instead we are moving inevitably, and perhaps inexorably, towards a situation in which more and more of our people will be concentrated in fewer and fewer centres, with all of the problems that embodies. These are problems not simply of people grouping together but of lost potential, because there are other areas where people and industry could productively locate.

In the United States this happened in part by accident and in part as an outgrowth of their particular congressional system. Influential members of Congress were able to influence national defence and space administration policy to locate key science industries in the districts of southern congressmen. So it happened by accident.

That is not the pattern we should follow here. We do not want to apply the LIP principle to science industries. The fact that it happened by accident in the United States, and the fact that one of the consequences was the dispersal of population, the dispersal of creativity and the dispersal of a lot of industry, would indicate that we have in a science policy in Canada a very real capacity to move industry and to move people away from the traditional regions and places.

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That is one of the major opportunities we have lost so far in this country. There has not been the dynamic direction brought to a national science policy that there could have been. Indeed, in this country we have become wedded, I fear, to the prediction that a certain high proportion, something like 80 per cent of our people, will live in two or three major cities. It is interesting to note this prediction by a distinguished sociologist that was offered as a warning to the Government of Canada. The Government of Canada took this as a goal and is trying to concentrate people where it was warned they should not be concentrated. We need some clear policy to reverse that trend, and we have in a science policy the capacity to turn around that trend.

I wish to turn now to what may be called the nationalist question. Perhaps the most serious price we pay for a branch plant economy is that so much of the orientation that could be carried forward in Canada is shunted off to head offices in other countries, not simply the United States. That is the case in respect of virtually any indus-

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try. It is the case in respect of large motor companies such as Ford and other companies such as RCA and Dupont.

I wish to cite an example concerning the Canadian Celanese operation in Edmonton where there was an important research facility until it was closed down in the late 1960's because economic times became tough. When economic times get tough the first facility to be closed down is the research facility. Before the economic management of this government caught up to the Canadian Celanese operation and they closed their research facilities, they brought in an important new process which was practically the basis for a whole new industry. Where was that new process which was developed in Canada located? It was located in the State of Louisiana. This is the kind of thing that happens in industry. It is perhaps the major price we pay for our branch plant status.

This is a situation which Parliament can do something about. We could do something about it by establishing a national science policy within which the multinational companies and the domestic Canadian companies could operate. We are not doing that and the price we will pay in the days and years to come may be very severe.

Unfortunately the record of this government in terms of its indifference toward a science policy is nothing short of shameful. It should embarrass the government now, but more important it will cost us dearly in time to come. It is a situation we could begin to correct now by establishing the context of a national science policy to serve our industries and developments.

I wish to deal very quickly now—

The Acting Speaker (Mr. Penner): Order, please. I regret very much to interrupt the hon. member but the time allotted to him has now expired.

Mr. David Orlikow (Winnipeg North): Mr. Speaker, there is a very serious problem facing most countries in the world but facing this country in a particularly acute form. In this country we are spending less money as a percentage of our gross national product for academic and industrial scientific research than any other industrialized country in the world.

Mr. Drury: Incorrect.

Mr. Orlikow: The minister says that is incorrect. I shall place some figures on the record before I am finished. Despite that, the parliamentary secretary gave us the usual sermon one hears from the government benches to the effect that everything is the best of all possible worlds.

Since the minister indicates that what I said is incorrect, let me tell him that less than a year ago I spoke to a senior scientist of McGill University, in part of the city in which the minister formerly lived and still represents, who has no particular political opinion so far as I know. What I am about to say is essentially what he said, and I shall back this statement up with figures published in a recent issue of *Science Forum* which, so far as I know, is one of the most important scientific journals available in Canada to the general public.

I am told that the money spent on scientific research in Canada is particularly low in the industrial sector for the reason mentioned by the hon. member for Rocky Moun-