

If, therefore, the great advances made by science are to be applied to human life it is time that we should be considering how science can make that possible. If science is a means and if we are to promote it we must ask ourselves: To what achievement is our proposed scientific research to be the means? Since the social sciences will assist us to determine worthy ends for the application of physical science, which this bill proposes to promote, then the social sciences are at least of equal importance with the physical sciences. Indeed I would say that they are of greater importance, for what is the use of discovering atomic energy if it is to be used to destroy us wholesale? What is the use of hitching atomic energy to industry if it will rob the great bulk of the workers of employment and expose them to starvation in the midst of abundance? These are not rhetorical questions. They are practical. They are now facing us. For example, steam, electricity, the internal combustion engine—all these were the products of scientific research and all held great possibilities for the benefit of mankind. All were revolutionary. But because of a neglect of the social sciences, the beneficial ends which applied physical science might have achieved were never reached. If atomic energy comes anywhere near the expectations of those who speak of it most it will create a still greater revolution, and that revolution not only will be industrial but will reflect itself immediately in social relationships both within the national economy and in the field of international politics and trade.

But apart entirely from atomic energy there is still urgency for research in social science with a view to bringing it abreast of modern scientific progress. If that is not done the further pursuits of physical science are of doubtful benefit. We in this parliament are, I believe, quite up to date in our industrial technology. We would not wish to be represented as standing in the way of passing a bill of this sort because it would show us to be back numbers in the scientific sense. We want to be abreast of the times. We want to see our government lead and sponsor investigations of physical science. Of course we do. We are up to date in our physical science and in our industrial technology, but I suggest to you, sir, that we are antediluvian in our social studies and in our politics. I suggest again that the minister should give some thought at least to the point I am trying to make, and I hope that he will see fit to do something along the lines I am suggesting.

I assert also that this parliament should have something to say as to the degree of

secrecy to be exercised concerning scientific discoveries resulting from this publicly financed enterprise of research. I am wondering whether our scientists to-morrow under this act will be subject to the Official Secrets Act. Will they be liable to a charge of espionage if they happen to mention to some other scientists what they are working on, the progress they have made, and the hopes they have for what they are engaged in? I note that there is some mention of provision for liaison offices in London, Washington and Ottawa. I wonder whether that principle is to be extended. I believe that to bottle up scientific discoveries for any reason is to do violence to the very spirit and principle of science itself, and I hope that in any research furthered by this government every precaution will be taken for the fullest exchange of scientific knowledge between Canada and every other nation of the earth and that no attempt will be made to keep secret anything which our scientists may be fortunate enough to discover. By the same token they should have the suggestions and the opinions of other scientific students across the entire world.

I have referred to the apparent opposites which history has revealed in the human struggle. These struggles will appear later, say five hundred years hence, insignificant. To-day some of us are struggling in this house against each other and we are quite serious about it; I imagine that five hundred years from now some of these questions will have come within the range of science and will seem extremely petty. I do not suppose that people at that time will pay much attention to them; rather they will wonder how anybody spent any time on them at all.

I am bringing this out because, lacking confidence in this particular branch of science, namely sociology, people have gone very much astray. Men have been tortured and slain for causes which a few centuries later would be relegated to the funny papers. One finds the same antagonisms here; even in this parliament, racial, religious and political prejudices exist. All these thrive where the light of science is precluded. Our own parliament reflects these fears and prejudices in its wrangling over the basic ideas of the various parties. There is nothing either creative or scientific in that practice, and this I say even though I have my share in it. I think it is well for us to remember that no political idea, no political philosophy, no political party is absolute; it will be much nearer to say that they are obsolete. For that matter, neither private ownership of industry and enterprise, nor public ownership of industry with social objectives, nor the most complete control and