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Speech given by Dr. G. Herzberg at dinner in his honour at Government House, Ottawa, Tuesday, 30 November, 1971
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Speech given by Dr. G. Herzberg at dinner in his honour
at Government House, Ottawa, Tuesday, 30 November, 1971

Your Excellencies, Mr. Prime Minister, Ladies and Gentlemen:

I am deeply touched by the honour that you, Your Excellencies, have done me in having this delightful dinner for me, and that you, Sir, have done me in addressing me in such generous terms. On a few previous occasions I have had the privilege of being invited to these beautiful surroundings and being entertained by Your Excellencies, who know so well how to make your guests feel comfortable and relaxed and enjoy your hospitality. When I came to this country with my wife 36 years ago as a refugee (incidentally with exactly \$2.50 in my pocket) I could not have dreamed that one day I would be honoured in such an extraordinary way by the Government of Canada.

It is obvious that the work that has earned me the Nobel Prize was not done without a great deal of help. First of all, while at the University of Saskatchewan I had the full and understanding support of successive Presidents and of the Faculty of the University who, under very stringest conditions, did their utmost to make it possible for me to proceed with my scientific work. It was the first President of the University of Saskatchewan, Dr. Walter C. Murray, who was stimulated by a then junior staff member, John Spinks, now the President of the University of Saskatchewan, to invite me to come to Saskatchewan. Indeed, this was the only firm offer of a position that I had at that time.

. Since I came to the National Research Council 23 years ago I have had the support of the Presidents of NRC, from C.J. Mackenzie, E.W.R. Steacie and Guy Ballard to the present President, Dr. Schneider. I would like particularly to pay tribute to the late Ned Steacie. As soon as he heard that I was not entirely happy in the United States, he suggested that we have a discussion about the possibility of my coming here; later he persuaded me to take on the Directorship of the Physics Division. He also taught me how to direct a division, namely, not to tell people what to do but mainly to find bright people.

Last, but by no means least, I must mention my indebtedness to all my collaborators during all these years. I shall not name them all individually but shall mention only one name. I was extraordinarily lucky when the most brilliant student I had during my university career agreed to join me at NRC right from the beginning and help me to set up a laboratory in spectroscopy. I am not exaggerating when I say that without Alec Douglas's constant help, his critical judgment and his experimental skill, I would not be standing here now. Another person to whom I owe a great deal is my technical assistant for 20 years, Mr. Jack Shoosmith, who helped me in all the experimental work with great efficiency and devotion. I am glad that both he and Alec Douglas and many of my other collaborators, past and present, as well as former Presidents and the present President of NRC, are here to-night. I appreciate, Your Excellency, the implication of your invitation to them that this honour, the Nobel Prize, is an honour to the members of our spectroscopy laboratory and to the National Research Council.

There has been a tendency on the part of the public and the press to think that with the award of a Nobel Prize the international status of Canadian science has suddenly changed. I believe that the respect for Canadian science and Canadian scientists throughout the scientific world has not changed one iota. What has changed is the public knowledge of this respect. There are to-day just as many internationally recognized Canadian scientists as there were five weeks ago, and among them are quite definitely several of Nobel Prize calibre.

By building the National Arts Centre and by other actions the Government of Canada has shown that the people of this country are not interested in mere survival as a national goal, that they want to support the performing arts, as well as the fine arts and literature. What I would like to emphasize is that pure science is another of the activities that lifts us above a purely

mercenary status and that the support of science for cultural reasons alone should not be neglected. In this connection it is interesting to record that the Nobel medal which I shall be receiving next week has a Latin inscription from Virgil, the same for all four prizes (even though otherwise the medals are different), which is

"Inventas vitam juvat excoluisse per artes"

for which, in the book which was sent to me, only a French translation is given

"Qu'il est doux de voir la vie humaine s'embellir
par l'invention des arts"

or in English:

"It is wonderful to see life enriched by the
invention of the arts".

Clearly the Nobel Foundation considers the Prizes in the Sciences to have the same purpose as the Prize in Literature, namely, to reward contributions to the human spirit, i.e., to the cultural benefits of mankind.

In science, of course, such contributions often lead to material benefits to mankind. Since one cannot predict discovery these material benefits are usually quite unexpected and not foreseen by the scientists involved (nor of course by anyone else). The motivation of many scientists working in pure science is the striving for knowledge for its own sake. Applications can rarely be foreseen and are up to the technologist to find on the basis of the work of the pure scientist.

In a speech last March I compared somewhat jokingly the present situation in science with the situation in the Army. I said: "Recent reports indicate that for every private in the Army there are four of higher rank. Now it appears to me that for every working scientist there are four persons spending their time deciding how and where and when he should work". Some of my friends have warned me that after receiving the Nobel Prize I would now belong to this higher rank. May I say that I have every intention of

returning to the rank of private in the army of Canadian scientists once the first flurry connected with the Prize is over. Indeed my future happiness will depend on how successful I shall be in this effort.

Thank you again, Your Excellencies, for this memorable occasion with which you have so greatly honoured me and, with me, the National Research Council and the many brilliant collaborators who have made our laboratory known throughout the world.