The Presentation
of the second
ATOMS FOR PEACE AWARD
to
GEORGE CHARLES DE HEVESY
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Within the span of one man’s life, science, technology and economic and political developments have brought a greater and more world-embracing change in the life of mankind than had previously taken place in centuries or, in some respects, even millenia.

The last half century has brought to fruition, with revolutionary consequences, ideas and initiatives of generations. The change is in no way complete; we are perhaps only at its beginning. The final results are still undetermined, but, to a large extent, will be decided by our way of reacting to the developing situation.

In very simple words, one of the leading nuclear physicists has formulated our personal problem when he says that the ways that we learned in childhood are now only very meagerly adequate for the issues that we must meet in maturity. His words stress how developing knowledge and technology, and a developing society, require of us a continuous development also of the individual.

In an often quoted statement, Arnold Toynbee has pointed to the awareness of the responsibility of the more highly developed societies for those who have lagged behind in the race as the most characteristic new fact of our generation. This new awareness, however, seems to me to be rather a symptom of change than an independent and decisive factor in the change. We can
easily trace its roots in the past and its background in the present.

How much of this new awareness is spontaneous, and how much of it is a response to a demand for a share of the place in the sun by that vast majority of mankind which has been left behind? Back of the demand and back of the response we find ideas that, in national communities, broke through long ago in the French Revolution, in the American Revolution and — not to be forgotten — in the Soviet Revolution.

These ideologies of past and present generations would not have brought our world to the ferment in which we find it at present, had it not been for the development of communications over the last decades. I, myself, and certainly many of us, have had the privilege of meeting pioneers who penetrated into Gobi or to Lhasa by foot, or men who crossed the Arctic icecap with dogs. Today the same regions are easily reached by plane by anybody, while the voice of the political leaders now can penetrate to the innermost recesses of what was terra incognita only some decades ago. Members of a family who starve in the Indo-Chinese jungle nowadays are people we all may meet. It is no longer a feat to visit the clay huts of the desert. And we have no excuse not to tackle with our modern equipment the diseases of children in the igloos of the Arctic region. Likewise, difficult though it may be to envisage what the standard of life and the political liberties in highly developed countries mean to such societies, the road has been opened to everyone in the most remote places of the globe to compare his position with that of more fortunate peoples. Thus, ideas and ideologies peculiar to the West have in our time, in their practical application, become factors in global development and of global significance.

The discoveries and inventions which have opened the doors for personal contacts all around the globe, and for the written and spoken word in every quarter, have, at the same time, put at our disposal means by which we have unprecedented possibilities to change conditions of life for the better, for all people. Our increased knowledge has given us new sources of power and new insight into the nature of disease. It may be that we are still far from mastering disease, and it may be that we are still far from mastering the new sources of energy sufficiently well to meet the demand of a quickly growing humanity for a life in dignity without fear. But, the newly developed perspectives are such that political economy need no longer be the "dismal science" of the days of Malthus.

Thus, in this epoch of change we see science as a primus motor but likewise as a human activity from which we may expect many of the replies to our present day problems as they are determined by our concepts of man and society in their new, world-wide application.

The half-century which I have characterized here as an epoch of change, has also seen two global wars of unprecedented violence and destruction, the last one having the additional — and doubtful — honor of hav-
ing introduced the ultimate results of modern science into the destructive arsenal of men.

The more than thirteen years of peace which have followed the end of the Second World War have been characterized by two major sets of conflicts, both of which have shown possibilities of leading to a situation where a new global conflagration might strike us — I mean both the Cold War, in all its ramifications, and the manifold tensions between the historical West and the peoples of the Asian and African continents.

Obviously, these conflicts are closely related to the developments I have just mentioned. They point to the relations of man to man, of man to his environment, and of groups to groups as an overriding problem of our time which must be solved not only in order to preserve the peace necessary for survival, but also to induce an atmosphere in which science and technology may find it possible to yield results which would enable us to meet the demands which science itself has in part created.

I have referred to some spectacular aspects of the problem of human relations at the present time. Considering them, and what they represent, we finally are led back to problems of the individual in the present phase of the development of the international community, of the nation and of the many units and groups of which the individual is a member.

Mass movements, means of mass communication, pressures of mass interests, the access to new enormous resources of strength and wealth, together with the rapidity of change, have taken the individual unaware

and created situations which he still has to learn how to master. Indeed, “the ways that we learned in childhood are only very meagerly adequate to the issues that we must meet in maturity”.

One risk facing equally the worker, the artist, the scientist and the politician, is the suppression of the inner freedom of the individual through demands for subordination and conformity. There is less tolerance for the personal, perhaps erratic, experiment in life than in times which could afford more tolerance. However, the need for such tolerance is as great as ever in the very interest of progress and in the interest of peace.

At this point, I would like to quote two leading nuclear scientists. The first one is an American, who has said “the open society, the unrestricted access to knowledge, the unplanned and uninhibited association of men for its furtherance — these are what may make a vast, complex, ever-growing, ever-changing, ever more specialized and expert technological world, nevertheless a world of human community”. The other one is a leading scientist from Europe who, speaking with the full authority of a wide personal experience, stated at the Second International Conference on the peaceful uses of atomic energy: “Science actually requires a perfect sincerity with oneself as well as with others, an objective pursuit of truth which goes beyond its own field and penetrates the nexus of relationships between men. It demands a discipline of thought and expression that rejects the empty emotional bombast which is so particularly apt to put peoples against each other”.

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effort to give to that change a constructive direction. The Organization is based on the recognition of the fundamental unity of all mankind in its interest in peace and in progress based on justice and freedom. Its basic idea is not one of an enforced unity with a deadening subordination of the nation, the group or the individual under a global pattern. The concept which it reflects is what the American scientist I have already quoted once characterized in some words about the unity of science. He said that this unity is "far more a unity of comparable dedication than a unity of common total understanding". He continued: "This heartening phrase, the unity of science, often tends to evoke a wholly false picture, a picture of a few basic truths, a few critical technical methods, and ideas, from which all discoveries and understanding of science derive; a sort of central exchange, access to which will illuminate the atoms and the galaxies, the genes and the sense organs. . . . The history of science is rich in examples of the fruitfulness of bringing two sets of techniques, two sets of ideas, developed in separate contexts for the pursuit of new truth, into touch with one another. The sciences fertilize each other; they grow by contact and by common enterprise. Once again this means that the scientists may profit from learning about any other science. . . . It means that the unity is a potential unity, a unity of the things that might be brought together and might throw light one on the other. It is not global or total or hierarchical".

These words about the unity of science are, I believe, profoundly true about all those human activities which create society and determine human relations. Especially do I know that they apply to the interests and activities which are brought together within the sphere of the United Nations. If the United Nations is to succeed in giving to the development of the world all that this experiment in organized co-existence can yield, it will be on the basis of a recognition of our fundamental unity, in the sense described in this quotation, and through the devoted efforts of men who, like today's prize winner, dare to be pioneers in their field of activity and who dare to risk "a fruitful mistake" in their effort to meet the challenges of an ever widening knowledge and of ever widening — but also ever more complex — human relationships.

Our world of change is one in which only those who show this intellectual and moral courage — and who are free to exercise it — will be able to face the challenge of the future.