

Remarks in introducing Dr. Hideki Yukawa, 1949 Nobel Prize Winner in Physics--and Mrs. Yukawa, interpreter of classical Japanese Dances--to College Assembly, Montclair State Teachers' College, 25 April, 1950.

--by Dr. Frederic H. Young.

President Sprague, Distinguished Guests, Faculty and Students of Montclair:

We are remarkably honored in having as our speaker this morning, the 1949 Nobel Prize Winner in Physics. It sounds somewhat like a grievous understatement to say that this personal appearance of one of the world's greatest scientists, is an outstanding event in the annals of the expanding destinies of our college.

Since the beginning of the twentieth century, the Nobel Awards for distinguished attainment in the fields of literature, science, and the furtherance of world peace, have become accepted, the world around as the most respected known instrument for the determination and the recognition of those who, in our time, are among the supremely creative spirits in the arts and sciences of humanity.

Our speaker holds, however, a double distinction: for, in addition to the superb honor of belonging to that choice company of artists, scientists, and statesmen--a company which includes such personalities as Tagore, Thomas Mann, Elihu Root, Marconi, the Curies, Woodrow Wilson, Einstein, and T.S.Eliot--our guest today is also the first Japanese in history to win a Nobel award.

It is a joy to say a word about Mrs. Yukawa who graces this occasion with a very different contribution than that of her eminent husband. In all candor, Dr. Yukawa, the majority of us are much more intelligently responsive to the visible beauties of the Japanese dance, as enacted by Mrs. Yukawa, than to the invisible beauties of the meson! When Mrs. Young and I met Mrs. Yukawa on the campus of the Institute for Advanced Study at Princeton last June, we had not the wildest fantasy that she would be executing Japanese dances for our college community in April! Her charm, beauty, talent, and indefinable poise, will convey their own exquisite flavor to this program.

In conclusion, I quote Dr. Robert Oppenheimer's tribute to Dr. Yukawa, as published by the Asahi Shimbun Press in Tokyo last January. Dr. Oppenheimer, as you know, is Director of the Princeton Institute for Advanced Study, and is one of the top physicists of the world. He graciously sent me ~~me~~ a copy of his tribute to Dr. Yukawa for this occasion, which copy I now quote:

"The Award of the 1949 Nobel Prize in Physics to Dr. Hideki Yukawa has brought universal rejoicing to his colleagues in all countries and in almost all branches of fundamental physics. We all recognize a debt to Yukawa for one of the great fructifying ideas which has determined the course of our science.

"Until Yukawa's proposal of the meson, the great developments in atomic physics were all derivative from the discovery of the finite velocity of light in Einstein's theory of relativity, and the gradual understanding of the consequences of the quantum of action. These two great findings, with their far-reaching conceptual effects on the classical structure of physics, were supplemented in a radical way when Yukawa introduced a new notion, not present in classical physics, of a new kind of force and a new kind of structure underlying the physical world. His initial intuitions have in many ways been brilliantly confirmed by experiment. Far more important, they have provided the guide for the overwhelming majority of basic researches of an experimental nature. This is true in the interpretation of the wondrously complex phenomenon of cosmic rays, where ideas going back to Yukawa have time and again proved the key to understanding. It has been true of the great program of electro nuclear accelerators which almost without exception have been ~~designed~~ designed around the physical principles first enunciated by Yukawa.

"At the present time, the very novelty of the elements introduced by Yukawa into physics constitutes a great challenge to theoretical description; and it is clear that, as was the case of the discovery of relativity and of the quantum of action, full maturing of his discovery will bring with it new mathematical developments and new conceptual changes for which we are not yet in any detail prepared. The great work which Dr. Yukawa has encouraged and fostered in Japan among theoretical physicists makes it appropriate to hope that just in these developments he and his colleagues will make further decisive contributions."

Those words of praise by Dr. Oppenheimer to Dr. Yukawa, enable us to realize one fact very clearly: namely, that Yukawa is to be ranked as one of the three most creative thinkers in physics during the first half of the twentieth century.

Dr. Yukawa, we welcome you to Montclair with an exceptional warmth; for we are not unmindful of your generosity in that, amid the pressures of world-fame, you have found time to bring yourself and your message to us. You remind us again that greatness of heart, of mind, and of science, knows absolutely no geographical, racial, or political frontiers. We are glad to have you in America and especially in Montclair. Or, if I may attempt to say the same in your own language:

Yukawa Hideki Hakase/ Anata ga America ni/ soshite tokuni Montclair ni/ korareta koto o/ ureshiku omoimasu.

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