

# SCIENTISTS WARN: PEACE OR DEATH

*One of Einstein's last acts was to join eight world-famous scientists in alerting humanity to the danger of annihilation if war remains*

*On April 18, the day Einstein died, the noted British mathematician and philosopher Bertrand Russell received a letter from Einstein in which the great scientist subscribed to a statement urging the banning of war that Russell was circulating among noted scientists all over the world, both communist and non-communist. On July 9, a week before the opening of the "conference at the summit," Dr. Russell made this important statement public under the signatures of nine world-famous scientific figures, both communist and non-communist. Seven of the nine signers are Nobel Prize winners. The signers are: from the United States, Albert Einstein, Prof. Percy W. Bridgman (Harvard), Prof. Hermann J. Muller (Indiana University); from England, Bertrand Russell, Prof. Joseph Rotblat, Prof. Cecil F. Powell; from France, Prof. Frederic Joliot-Curie; from Poland, Prof. Leopold Infeld; from Japan, Prof. Hideki Yukawa.*

*This stirring statement is one of the more important signs that the people are determined that there shall be no more war. In a sense it is Einstein's last testament to the world. Because of its great significance, we reprint the text of the statement below.—Eds.*

**I**N the tragic situation which confronts humanity, we feel that scientists should assemble in conference to appraise the perils that have arisen as a result of the development of weapons of mass destruction and to discuss a resolution in the spirit of the appended draft.

We are speaking on this occasion, not as members of this or that nation, continent or creed, but as human beings, members of the species man, whose continued existence is in doubt. The world is full of conflicts; and overshadowing all minor conflicts, the titanic struggle between communism and anti-communism.

Almost everybody who is politically conscious has strong feelings about one or more of these issues; but we want you, if you can, to set aside such feelings and consider yourselves only as members of a biological species which has had a remarkable history and whose disappearance none of us can desire.

We shall try to say no single word which should appeal to one group rather than to another. All, equally, are in peril and if the peril is understood, there is hope that they may collectively avert it.

We have to learn to think in a new way. We have to

learn to ask ourselves, not what steps can be taken to give military victory to whatever group we prefer, for there no longer are such steps; the question we have to ask ourselves is: what steps can be taken to prevent a military contest of which the issue must be disastrous to all parties?

The general public, and even many men in position of authority, have not realized what would be involved in a war with nuclear bombs. The general public still thinks in terms of the obliteration of cities. It is understood that the new bombs are more powerful than the old and that, while one A-bomb could obliterate Hiroshima, one H-bomb could obliterate the largest cities, such as London, New York and Moscow.

No doubt in an H-bomb war great cities would be obliterated. But this is one of the minor disasters that would have to be faced. If everybody in London, New York and Moscow were exterminated the world might, in the course of a few centuries, recover from the blow. But we now know, especially since the Bikini test, that nuclear bombs can gradually spread destruction over a very much wider area than had been supposed.

It is stated on very good authority that a bomb can now be manufactured which will be 2,500 times as powerful as that which destroyed Hiroshima.

Such a bomb, if exploded near the ground or under water, sends radioactive particles into the upper air. They sink gradually and reach the surface of the earth in the form of a deadly dust or rain. It was this dust which infected the Japanese fishermen and their catch of fish.

No one knows how widely such lethal radioactive particles might be diffused, but the best authorities are unanimous in saying that a war with H-bombs might quite possibly put an end to the human race. It is feared that if many H-bombs are used there will be universal death—suddenly only for a minority, but for the majority a slow torture of disease and disintegration.

Many warnings have been uttered by eminent men of science and by authorities in military strategy. None of them will say that the worst results are certain. What they do say is that these results are possible and no one can be sure that they will not be realized. We have not yet found that the views of experts on this question depend in any degree upon their politics or prejudices. They depend only, so far as our researches have revealed, upon

the extent of the particular expert's knowledge. We have found that the men who know most are the most gloomy.

Here, then, is the problem which we present to you, stark and dreadful, and inescapable: shall we put an end to the human race; or shall mankind renounce war? People will not face this alternative because it is so difficult to abolish war.

The abolition of war will demand distasteful limitations of national sovereignty. But what perhaps impedes understanding of the situation more than anything else is that the term "mankind" feels vague and abstract. People scarcely realize in imagination that the danger is to themselves and their children and their grandchildren, and not only to a dimly apprehended humanity. They can scarcely bring themselves to grasp that they, individually, and those whom they love are in imminent danger of perishing agonizingly. And so they hope that perhaps war may be allowed to continue provided modern weapons are prohibited.

This hope is illusory. Whatever agreements not to use H-bombs had been reached in time of peace, they would no longer be considered binding in time of war and both sides would set to work to manufacture H-bombs as soon as war broke out, for, if one side manufactured the bombs and the other did not, the side that manufactured them would inevitably be victorious.

Although an agreement to renounce nuclear weapons as part of a general reduction of armaments\* would not afford an ultimate solution, it would serve certain important purposes.

First: any agreement between East and West is to the good in so far as it tends to diminish tension. Second: the abolition of thermonuclear weapons, if each side believed that the other had carried it out sincerely, would lessen the fear of a sudden attack in the style of Pearl Harbor, which at present keeps both sides in a state of nervous apprehension. We should, therefore, welcome such an agreement, though only as a first step.

Most of us are not neutral in feeling, but, as human beings, we have to remember that, if the issues between East and West are to be decided in any manner that can give any possible satisfaction to anybody, whether communist or anti-communist, whether Asian or European or American, whether white or black, then these issues must not be decided by war. We should wish this to be understood, both in the East and in the West.

There lies before us, if we choose, continual progress in happiness, knowledge and wisdom. Shall we, instead, choose death, because we cannot forget our quarrels? We appeal, as human beings, to human beings: remember your humanity and forget the rest. If you can do so, the way lies open to a new paradise; if you cannot, there lies before you the risk of universal death.

We invite this congress [to be convened], and through it the scientists of the world and the general public, to subscribe to the following resolution:

\* Professor Muller makes the reservation that this be taken to mean "a concomitant balanced reduction of all armaments."

"In view of the fact that in any future world war nuclear weapons will certainly be employed and that such weapons threaten the continued existence of mankind, we urge the governments of the world to realize, and to acknowledge publicly, that their purposes cannot be furthered by a world war, and we urge them, consequently, to find peaceful means for the settlement of all matters of dispute between them."

PROF. PERCY W. BRIDGMAN.  
ALBERT EINSTEIN.  
PROF. LEOPOLD INFELD.  
PROF. HERRMANN JOSEPH MULLER.  
PROF. CECIL F. POWELL.  
PROF. JOSEPH ROTBLAT.  
BERTRAND RUSSELL.  
PROF. HIDEKI YUKAWA.  
PROF. FREDERIC JOLIOT-CURIE.

*In memory of the first anniversary  
of the death of Vito Marcantonio  
on August 9, 1954*

## FOR MARCANTONIO

*By Henri Percikow*

Friend and tribune of the poor,  
Forever gone, are your sheltering arms  
And your heart that found its warmth  
In the rainbow of all races.  
Forever gone, our devoted Marc,  
Who towered above the corrupt statesmen of our land,  
Farewell, Marc.

Stricken on the people's battleline  
Your death stabbed the hearts of men,  
Who came to mourn their friend, leader and brother,  
Weeping from rooftop and doorway,  
Amidst banks of flowers—the carpenter's son,  
Who will no more walk at our side.  
Green tree, felled in our forest—  
The seedlings shall grow ever stronger,  
Farewell, Marc.

Fearless and brave people's warrior  
Above the din of guns  
Your voice for peace would thunder.  
Loyal friend, you never betrayed  
The banner of human dignity.  
We shall sing of you to the coming generations  
Your life was fertile and unstained in the poor man's cause,  
Farewell, Marc.