

A-BOMB PLUS 3 YEARS

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"Auguste Comte invented the Atom Bomb." That statement would undoubtedly meet with a varied response. Nine-tenths of the people might justly ask, "Who is Auguste Comte?"; and the other tenth who know the quiet French philosopher of the last century might quite as justly deny the statement emphatically. In a real sense, they would be right, because Auguste Comte did not actually invent the atom bomb which fell on Hiroshima three years ago. But in another sense, he had a great deal to do with it because he crystalized the philosophy which led up to it.

In 1843, his book, *Positive Philosophy*, was published. At first glance, it was just a quiet book by an unassuming inspector of schools. But there was more to it than that. Like Rousseau, Comte summed up the spirit of a whole movement in the capsule form of a single book. What *The Social Contract* was to the French Revolution, Comte's book was to the Industrial Revolution and the Scientific Age to follow. His book was the catechism of the experimental method whose peak of achievement was the atom bomb.

Several of his conclusions, as we shall see, were wrong, but we must not think him a shallow or

insincere thinker. The man who devoted himself to philosophy at the age of twenty and held the great Greek thinker, Socrates, as his model may have made mistakes in his reasoning, but his sincere desire and persevering search for the truth are unquestionable. Comte held that truth can be discovered only in the laboratory by the experimental method. He denied that philosophy could arrive at metaphysical truth by reason alone, such facts as one's own existence or that a thing cannot "exist" and "not exist" at the same time. To Comte the only way to arrive at truth was through the senses. If a thing could not be charted on a graph or seen through a microscope, for Comte, it was of no value. The platform of the Positivists, as Comte's followers were called, might have been summed up in the slogan, for an answer, trudging along, hands in pockets.

"If you can't see it, you can't believe it".

The scholastic and realistic philosophers have not denied that the laboratory was an efficient way to solve many problems, (it would be rather difficult to deny this in the face of modern advancement), but they have denied emphatically that the solution to

all problems, especially those dealing with human relations, could be found in the laboratory. If you want to find the cause of hydrophobia you will have to go into the laboratory and you will have to work as hard as Pasteur did when you get there. But if you want to find the first cause of the person who has the hydrophobia, or the purpose of his life, or the norm he should hold in his dealing with other men, the laboratory cannot give the answer. You will have to sit down somewhere and reason it out philosophically from first principles. So the issue between the philosophers and the positivists is not over the truth of scientific findings but the exclusiveness of them.

To most people the argument seemed mostly a debate of the schools with nothing much at stake. The philosophers challenged the positivists to prove experimentally the rock-bottom foundations of human relationships, but they couldn't. What is justice? What is just war? How can you determine that by the scientific method? But the Positivists were by no means chagrined. "Perhaps the scientific method at its present stage of development could not fully cope with these problems, but it was developing. Give it time and in the near future it might be able to. Look at the vast strides already made in the fields of Experimental Psy-

chology, Psychoanalysis, and Statistics,—strides which were made by the experimental method and which had cleared up problems which fifty years ago were considered unsolvable. The experimental method would find the answer; all it needed was time. Besides, there was no need to hurry.' But a recent event made the situation take an abrupt about-face. When the atom bomb fell on Hiroshima, there very definitely was a need to hurry in order to find out how to control it, and the failure of the United Nations Atomic Commission has still left the problem to be solved.

The atom bomb by no means exhausts the arguments that philosophy could use to prove its point. The philosopher's position in claiming that the laboratory cannot solve all problems was as strong the day after Comte published his work as it is today. However, the atom bomb is a fact of such importance to all thinking persons, that it proves a timely test-case for an old argument.

The scientist built the atom bomb by working in the laboratory. Through a step-by-step process he revealed the secret of the tiny atom with all its gigantic effects. It was the crowning achievement of the experimental process; the furthest advance in science that men had ever made.

But then comes along the all-important question, "How are we going to control it? What are we going to do with it?" There is no doubt that the atom bomb is a fact; there is no doubt that the scientists have found the true key to atomic energy. No one in his right mind would deny it. But what everyone wants to know, and wants to know very definitely, is how we are to make use of this fact. And it is exactly at this point that the laboratory bogs down. The scientist can tell you how they made the atom bomb and the discoveries that led up to it, but he cannot tell you how to use it rightly, because the right use of the atom bomb, or anything else, cannot be measured in a test tube. If you want to learn the answer you have to leave the laboratory and settle down for a little solid thinking.

It's no longer a matter of indifference that can be passed off with a shrug of the shoulders or sidetracked with a cynical "Who knows?" Anyone who has seen the pictures of Hiroshima and Nagasaki, or has read the results, of Bikini has passed that stage. If the Positivists still maintain the only way to solve the problem is in the laboratory, we can brand them with their own favorite epithet, "old fashioned". The world is faced with a problem, and science by itself does not have

the answer. The fact is, however, that many scientists realize the inadequacy of science to solve the problem and are appealing along with the philosophers for a whole-hearted effort to establish true principles for using the bomb and to eliminate false ones.

Professor Einstein in *One World or None* says, "The construction of the atom bomb has brought about the effect that all people living in cities are threatened, everywhere and constantly, with sudden destruction. There is no doubt that this condition has to be abolished if man is to prove himself worthy, at least to some extent, of the self-chosen name of *homo sapiens*, or man of wisdom."

And again President Truman's Commission on Education quotes Professor Einstein to point out the gravity of the situation, "Being an ingenious people, Americans find it hard to believe there is no foreseeable defense against atomic bombs. But this is a basic fact. Scientists do not know of any field which promises us any adequate hope of defense . . . our defense is in international law and order."

The Federation of American (Atomic) Scientists, which was formed just to treat the problem of atomic energy, makes the following statement about proposals to control the bomb, "Proposals

which on the one hand imply no material change and require no working staff cannot succeed; proposals which, on the other hand, seek to partition among the bureaus the problem of a decade hence cannot succeed either. The problem is a problem of living men and a developing phenomenon. The solution cannot be written wholly on paper."

From these statements it is evident that a solution to the whys and wherefores of the atom bomb is more subtle than science can handle by itself. Chesterton once said that when the practical man gets confused he goes to the "impractical" man to get straightened out on fundamental principles. Perhaps this is the prescription men are looking for. They have tried the laboratory and it doesn't have the answer, and there is no time to wait, so they are turning to philosophy.

Of course, there is no friction between the true scientist and the true philosopher. It is only when science limits truth exclusively to the laboratory, as Comte and his followers have tried to do, that the philosophers are forced to oppose them.

The problem of controlling the atom bomb and the need for a speedy solution to it have badly shaken the Positivist position. The world is asking "What about the

atom bomb?", and the Positivist has to say that there is no right answer because he cannot test it in the laboratory to find out whether it is true or false. However, the world has sunk far too much in this last war to be put off so easily. If the Positivists do not have the answer we have to go back to solid ethical principles as revealed by reason and strengthened by faith. True peace is not the outcome of a formula, or a graph, or a Gallup Poll. It is the outcome of justice and charity, as the Vicar of Christ has said so often. When men desire these, the problem of the atom bomb will not be unsolvable. As things stand now, many people are convinced that philosophy is not as antedated as they had thought. Sound ethics are needed as never before. But philosophy must remember, as Maurice Blondel says, that its problem today is to define and clarify the irreducible reality that belongs to values, to give values a degree of transcendence without localizing them in an artificial firmament of the mind. Whether and when philosophy will meet the problem successfully the future alone will reveal; but there is one thing certain at present,—that the laboratory alone, the strictly scientific method, cannot measure up to the problem by itself.