

The Right to Search for Knowledge

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To a scientist, knowledge is much more nearly a way of finding out things than it is a collection of things that have been found out. At the very least knowledge is fluid, constantly changing, always growing but always subject to revision, even though the revision sometimes involves the abandonment of firmly held opinions.

Consequently, to me as a scientist man's right to knowledge necessarily implies man's right to that search for knowledge which we call research; it is at least as much man's right to the laboratory as it is his right to the library. It is the right to strive for a continually growing understanding of nature and for a continually increasing ability to control the processes of nature.

Every human right worth having has had to be won by human struggle against the forces of nature or against the forces of evil within man. No human right once won has ever continued to exist for long without an unceasing effort to maintain and to defend it. A human right is a privilege which man retains only if he accepts the responsibility of protecting it. Man's right to the search for knowledge is no exception. It is a dearly won privilege for which men have had to sacrifice comfort and property and life itself in the past, and it is a privilege which is more or less openly under attack even here.

Even in our own country one need only look at the picture of idiocy by which the cartoonist usually symbolized the University Professor to realize that many

of our fellow citizens resent and dislike the man of specialized knowledge.

To a large extent this attitude can be attributed, I think, to a common failure to realize one fact and one probability. The fact is that a very large part of the material benefits we enjoy today can be traced back to discoveries made by scientists who were merely indulging their curiosity and had no idea at all what might be the eventual practical results of their investigations. The probability is that discoveries as revolutionary as nuclear fission, as antibiotics, as moldable plastics remain to be made. I don't know any way to predict the future except in terms of the past, and the facts of the past are that there has been a continuing sequence of great and unexpected discoveries, and that men have always thought after each of them that it was the last upheaval of this kind to be expected.

We are concerned, therefore, with a right which is under attack, which can easily disappear all over the world if it is not defended.

I can think of no cause for which I would willingly make greater sacrifices than the preservation of this privilege for those who follow me. But I recognize that for society as a whole this is a motive of limited appeal.

Men generally ought to recognize that the right to a living, growing knowledge is nearly equivalent to the right to survive.

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