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## SCIENTIFIC THOUGHT AND SOCIAL REALITY: ESSAYS BY MICHAEL POLANYI

Edited by  
FRED SCHWARTZ

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## FOREWORD

MICHAEL POLANYI

My meetings with George Klein aimed mainly at tracing thought processes shaped by immediate experience. I was looking for these with a view to the structure of scientific discoveries. I was made happy by the response I received from Klein; I hardly expected it from a scientist engaged in other inquiries. It was a happy event; but the papers republished here had different grounds.

The articles printed here were not exactly strange to George Klein's work, but their scope was different from it. They dealt with man's mental position within sciences aiming at mechanical explanations. I brought with me a general interest that I shared with some other scientists and philosophers. Klein joined us in this matter very warmly. This is how he came to collect a set of my articles for republication in the journal he was directing; his colleagues have told me about this. I was moved by this link to George, whom I loved and admired.

I would add a word here: the reader may notice some repetitions, which I hope he will set aside as incidental: they are parts of a battle I shared with George Klein. And I may also excuse them, since the troubles they spoke of seem more urgent today than they were at that time.

the derealization of his findings. There is no excitement, no discovery, no creative tension or sense of accomplishment. There is no "intellectual passion," to use Polanyi's evocative term. The end result is often banal research and a caricature of the inductive method, in which science indeed becomes a mere accumulation of facts. But what is even more troublesome, splitting results in a pseudo objectivism, because the scientist's motives are denied, in the name of objectivity, only to enter into his choice of work by the back door, from a scientific id. One thing we have learned from psychoanalysis is that motives cannot be incorporated into our reality unless they are acknowledged. From the vantage point of both a scientist and a philosopher, Polanyi has tried to show that science is basically a human activity.

## THE AUTONOMY OF SCIENCE

Today the position of science, which was unquestionably accepted in the Western countries for the last 300 years or so, has been challenged by an authoritarian doctrine.

It is difficult to trace a complete authoritative statement of the argument used in support of the state control of science. But I believe that in its most precise form this argument would run about as follows. "No scientific statement is absolutely valid, for there are always some underlying assumptions present the acceptance of which represents an arbitrary act of faith. Arbitrariness prevails once more when scientists choose to pursue research in any one direction rather than another. Since the contents of science and the progress of science both vitally concern the community as a whole, it is wrong to allow decisions affecting them to be taken by private individuals. Decisions such as these should be reserved to the public authorities who are responsible for the public good. It follows that both the teaching of science and the conduct of research must be controlled by the state."

I believe this reasoning to be fallacious and its conclusions to be wrong. Yet I shall not try to meet the argument point by point, but will instead oppose it as a whole by analyzing the actual state of affairs which it profoundly misrepresents. I shall survey the individuals and groups who normally make the decisions which contribute to the growth and dissemination of science. I shall show that the individual scientist, the body of scientists, and the general

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