

exhibit themselves, or are exhibited by a statement, but such exhibition is not sufficient to arrive at a workable notion of truth. There is, it is true, an interplay of disclosure and its opposite, concealment, but this cannot replace the interplay of meaning and fulfilment Husserl had devised, if only because something concealed can also be exhibited as such. The epistemic relation in Heidegger is a one-way relation of exhibition or disclosure and as such does not permit of substantiation. The advantages of this position – its flexibility, its rapport with the modern predicament of predominant praxis and untruth – cannot blind the author as to its basic epistemic shortcomings.

In Heidegger's later writings, the problematic can be seen to move further and further away from the problem of truth as it affects things or beings, in favour of a truth of being which cannot but fall short of the critical requirements maintained by the author.

In a concluding statement, the author expresses the belief that the said deficiencies are not intrinsic to Heidegger's position. In fact, he leaves room for a philosophy in which Heidegger's extension of the notion of truth – his notion of disclosure, his more radical quest for the conditions of the possibility of disclosure, his inclusion of history on a fuller scale than Husserl's – can be joined to a critical concern for truth in the spirit of Husserl. What he distrusts is a type of philosophy which would seek an absolute grounding of truth in an apodictic basis or in theoretical construction. He opts for clarification in order to substantiate truth.

Professor Dr. Klaus Hartmann

WAGNER, FRIEDRICH

Science and the Threatened World

[“Die Wissenschaft und die gefährdete Welt”]

München: Verlag C. H. Beck, 1964; 573 pp.

This book, in my opinion, merits a special discussion. For it is itself a novel and important work. Its importance derives from the enormous labour which has gone into it, for it is obviously the product of many years of research, and from the extent and quality of its intellectual penetration: the fact that the broad and significant source-material which it opens up has not been known or utilized hitherto can only be understood in the light of the evaluation it is here subjected to. And last but not least, it is important because of the courage with which the subject is tackled and the conclusions are presented.

A sociologist and historian of wide learning and painstaking scholarship, a careful seeker and finder of methodical lines of approach, here investigates

modern science as a phenomenon of human co-existence. He traces the practical and intellectual development of the system of enquiry and knowledge which prevails today and the system by which knowledge is applied. What emerges is a process of increasingly closer involvement of science with political and economic powers, which it makes use of, which it then serves, and which then make use of it – with appropriate consequences for the individual human being and for the “society” of human beings and nations. We witness the emergence of a split in consciousness, now endemic everywhere, which (either through habit or intention) is usually no longer noticed by the scientists themselves, by those who make use of them, or by those who are affected. We are shown the rise and development of the contemporary religion of science with its concomitant rationalism (which requires faith and whose faith is fanatical) from its self-confident and triumphant beginnings to its later paradoxes and despair.

The sociological phenomenon of atomic research is dealt with in particular detail, and parallel phenomena in other areas of study such as biology, genetics, cybernetics and astronautics receive briefer but no less incisive treatment. Among the sources used, the scientific and personal utterances of the leading scientists themselves are predominant. The detailed references provided in the footnotes tend in every case to reveal even more than is claimed in the textual narrative which is based on them (one of this work’s consistent merits – and a sign of scientific caution). The patterns of thought and methods which led to the idea and construction of the atomic bomb are described, and then the presuppositions and historical constellations which made spaceflights (via the earlier rocket-weapons) and automation (via anti-aircraft technology) possible. The development of nuclear and orbital weapons, of atomic strategy, of the industrial utilization of nuclear energy, of so-called population-protection and of the menace of atomic radiation, is also described as a historical and sociological process, together with corresponding phenomena in the field of genetics down to its plans for breeding super-men to compensate for the anticipated genetic deterioration of man through the effects of his own technology.

Those who have lived through the decades which have elapsed since the radioactive decay of radium was discovered in 1902 will read this with amazement at how little they suspected of what was going on in the laboratories and minds of others and how early and how fully the scientists were aware of the implications of what they had undertaken. And most readers, including specialists, will be amazed at how early (as with Roger Bacon 1269) the courses followed in more recent times, with their dominant impulses, schemes and Utopias, took shape. And they will be amazed to learn, for example, of that discussion at Magny in 1869, reported in the diary of

the Goncourt brothers, in which the chemist Berthelot and the physiologist Bernard predicted that science would in a century's time have discovered the laws of the atom and of life and could then strike out into the cosmos and create a new man – and of the Goncourt's inference that the God of old might then appear on earth with his bunch of keys, saying: *Messieurs on ferme!*

The existential questions which arise from the facts and contexts studied are clearly brought out in Friedrich Wagner's work and placed before those who are intellectually responsible, i. e. the scientists. It is all the more impressive that it is not an apostle of so-called humanity who is speaking, nor a mere alarmist out to arouse terror over a consciously initiated and consciously fostered development (no moralizing remarks are to be found in the work), but a careful and meticulous worker; for in this work, modern science for the first time really faces up to itself and submits to scientific criticism.

Can one foresee how the world, as we call it, will react to this book? Must the author be content with what Gneisenau said to his friend Clausewitz under the shadow of Napoleon's oppression, i. e. that they should at least set down their insights and attitudes in a work to pass on to future ages so that the latter might know that there had been men in their age too?

We are certainly familiar with the understandable reserve which modern scientists cultivate in order to protect their own activities from the gaze of other scientists. And likewise with the cool calculatedness with which highly critical projects are uncritically discussed in scientific circles as the point of departure for even more critical projects. And equally so with the prophetic smile with which those in interested circles come to an "arrangement" on current plans, their effects and the "elimination" of possible resistance. And do we not know which powers are behind such arrangements? Can we then consider it likely that this work will meet with understanding? But nonetheless, has it not always been the unlikely from which the new has arisen?

Professor Dr. Rudolf Fahrner

WEIZSÄCKER, CARL FRIEDRICH VON

The Scope of Science. Vol. I

[*"Die Tragweite der Wissenschaft"*. Bd. I]

Stuttgart: Verlag S. Hirzel, 1964; 243 pp.

The author, a natural scientist and philosopher undertakes a dialogue with those who sense the dangerous ambivalence of this scientific civilisation. He declares that we, as scientists, cannot dispense with philosophy, if we are to become aware of our own prejudices and presuppositions. These lectures on