

In Search of a Discipline By Our Special Correspondent

Edinburgh, November 5.

Is the science of science a science, or merely a rag-bag of miscellaneous broodings, not all of them scientific? This is the question which preoccupied, perplexed and often bewildered the Inaugural Seminar of the Science Studies Unit of the University of Edinburgh held here in the past two days. To report that the combined efforts of thirty distinguished people should not have produced a coherent view of what the science of science is about—or even what it should be called—is not to imply that there is no profit in the self-conscious study of the scientific process and its interaction with other human activities, but merely that the symposium spent much of its energy barking up the wrong trees.

Dr. Stephen Dedijer of the University of Lund, who stands out among the scientists of science as would Mr. Billy Graham from a group of Seventh Day Adventists, was not, however, restrained by the vagueness of his brief, for to him the science of science is a discipline without bounds. In the Soviet Union "it already extends to include economics, philosophy, etc.", and Dr. Dedijer believes that similar tendencies are everywhere apparent. Yet there is "no comprehensive theory of the science of science which has proved effective at all since the publication of Bernal's book in 1931". The doctrine "that everything that grows must stop growing" was dismissed as being based on elementary but unchecked data. Dr. Dedijer himself wanted more studies of the economic and other benefits of scientific activity and of the nature of creativity, and more interdisciplinary work involving economists and sociologists. The fact that units for the science of science are "being established all over the place" was to him a proof of need.

Protracted discussion of the meaning of the term "science of science" was ruled out of order by the chairman with the affirmation that "we all know what we mean by it", but nothing in what followed suggested that participants' interpretations were identical. Some speakers singled out for study the relationship between science and economic growth. Others wanted to keep a close watch on government departments. Dr. Christopher Wright of Columbia University threw in arms control, but went on to warn natural scientists that they could not expect, as of right, to play a part in the science of science, which is a field for sociologists; he did, however, offer them the hope that "the difference between the amateur and the professional social scientist" is not so great that scientists willing to take the trouble would be entirely excluded from respectable discussion of their affairs. In a more practical fashion, this theme was also echoed by Sir Frank Turnbull, until September of this year Deputy Under-Secretary at the Department of Education and Science and who has serviced a succession of advisory committees on science policy, who reminded the symposium that technical feasibility is not the only consideration in deciding whether to pursue technical projects. Sir Frank also provided a masterly demonstration that even retired civil servants can decline to be drawn on questions such as what the Zuckerman Committee is really for. The proceedings closed with a lament about the still non-existent World Medical Research Centre in the course of which the ears of Sir James Godber, Minister of Health in a previous government, and

Sir Harold Himsworth, Secretary of the Medical Research Council, must have been burning bright.

To list only these often desultory discussions would be to do the symposium an injustice, for there were four contributions of great interest. The opening address by Dr. D. K. Price of the Kennedy School of Government at Harvard University was an exceedingly elegant statement of twin truths such as the inevitability that science will have political consequences and the fallacy of believing that science is a sufficient foundation for a political system. In a brief intervention Prof. Michael Swann, Principal of the University of Edinburgh, effectively squashed the fear of one participant that the science of science would be corrupted if its practitioners were asked to provide direct help in the making of practical decisions. Dr. Bruce Old of Arthur D. Little Inc. gave a tantalizing description of how his organization is able actually to make money by helping the United States Government and commercial companies to solve practical problems. Then Mr. Lewis Gunn, of the Department of Politics at the University of Manchester, brought everybody to life for an hour with a paper intended to show how frail is the "received wisdom" on which are based the institutions at present administering science in Britain. Even in the science of science, it would seem, first hand experience clears the head.

New Home for NBS

THE National Bureau of Standards is now almost fully installed in its new complex of laboratories at Gaithersburg, 20 miles north of Washington, D.C. All but four of the fifteen buildings already on the rural site are occupied, and there will be a ceremony on Tuesday, November 15, to dedicate the new setting for the laboratory, now 65 years old. The occasion is also to be celebrated by a symposium on the link between research and prosperity on November 16 and 17.

The Washington part of the NBS—one third of the strength is based at Boulder, Colorado—is moving to new quarters because it has outgrown the crowded site, hemmed in by blocks of flats and suburban shopping centres, on the outskirts of the District of Columbia. The new site has been chosen not merely for its natural amenities but also by the need not to move too far from the houses of its people and yet far enough to satisfy the strategic planners in Washington who asked that the laboratory should be at least 20 miles

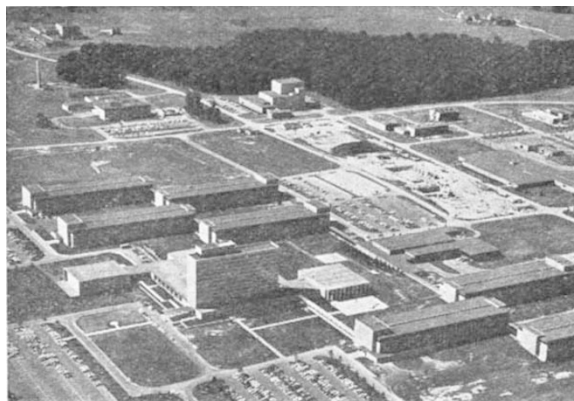


Fig. 1. The site for the NBS at Gaithersburg, Maryland, looking south. The tall administration block is surrounded by seven general purpose laboratories. The nuclear reactor is in the top left-hand corner of this picture.