

NOT FOR PUBLICATION

INSTITUTE OF CURRENT WORLD AFFAIRS

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OECD Scientific Directorate

27 Lugard Road,
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Mr. R.H. Nolte,
Institute of Current World Affairs,
366 Madison Avenue,
New York 17, N.Y..

Dear Mr. Nolte,

January 26, 1963 was not the most auspicious of days for an Englishman to be in Paris on a mission of enquiry into economic co-operation. As my taxi driver made quite plain in a vicious diatribe against De Gaulle, France had just put paid to the attempts of Britain to join the Common Market. However, my enquiry was not into the doings of the Economic Community, but to find out more of the work, particularly the scientific work, of the Organization for Economic Co-operation and Development (OECD).

I first became interested in this organization after a paper by its Scientific Director, Dr. Alexander King, had stimulated my interest in the subject of science and government. Yet curiously, no-one I spoke to seemed to know much about the activities of this organization. Curiously, because I found it to be doing some extremely interesting and important work-which deserves greater publicity and recognition than it appears to be getting.

The OECD is the successor of the Organization for European Economic Co-operation (OEEC) which was formed in 1948 and had as its first task the job of advising the United States Government on how to distribute the money offered under the Marshall Plan. It proved to be such a successful enterprise that it continued after the need for outside assistance had passed, and kept its close association with the United States and Canada. By 1960 however, it was decided that the initial terms of reference were no longer applicable to the present problems and so a new organization (OECD) was created, with somewhat different objectives. The members were the original twenty OEEC European countries, plus Canada and the United States as full partners. Japan is also likely to become a full member very shortly.

The principal objective of the organization is outlined in Article I of the OECD Convention. It states that OECD shall promote policies designed "to achieve the highest sustainable economic growth and employment and a rising standard of living in member countries while maintaining financial stability, and thus contribute to the development of the world economy".

Dr. King explained how it had gradually come to be realized at OEEC that education and research are an important "third

factor" which, together with capital and labour, plays a decisive role in economic growth. Therefore a Scientific Directorate was set up as a part of the organizational structure of OECD. Its principal function is to stimulate those scientific activities which contribute to the economic growth of its member countries. In the main it does this through the work of two committees.

The first is the Committee for Scientific and Technical Personnel. This is primarily concerned with the twin tasks of assessing the demands for scientific and technical personnel in its member countries, and of encouraging innovations and improvements in science teaching. As in many of its other activities, the Scientific Directorate accomplishes these objectives by (a) organizing conferences, such as the 1961 Washington conference on the relationship between education and economic growth, and (b) employing consultants to make specific studies and write reports. One activity which I found to be of particular interest is the Country Reviews of science education and policy. These are based on an idea which was first tried and proved successful by the economists in OEEC, and it has now been adopted by the scientists. A panel of experts from different member countries visits the country to be reviewed and makes a study of science education and policies in that country. After returning home they write a critical report, and this is then sent back to the country under examination. A cross-examination is later held where international experts put questions, and other experts from the country under review seek to justify their policies. In this way, all stand to benefit: the examining panel may get ideas which are relevant to their own countries; policy makers from the country under examination gain from the clarification in their own thinking; and they also get to know how they stand with respect to other countries. On the day I visited OECD, Sir John Cockroft was leading the cross-examination of United States educational policy. Other countries which have been reviewed in this way include Greece, Norway, Sweden, and Yugoslavia.

The other committee in the Scientific Directorate is the Committee for Scientific Research. Its work is mainly divided between two activities. One is the study of the administration and organization of research within individual countries, and the second is the promotion of international co-operation in scientific research.

The first group of activities involves the whole subject of national science policies; a subject which is of special interest to Dr. King. Writing in the second issue of the new OECD publication, The OECD Observer, he points out that the governments of most countries have accreted a number of scientific responsibilities, but very few have given much thought to co-ordinating these activities or to relating the scientific resources of their country to the national needs -- economic, social, or military. He makes it quite clear that the suggestion that each country develop its own science policies does not infringe on the ideals of freedom of science. On the contrary, a part of the policy must be to determine how to create those conditions in which pure science can best flourish.

The OECD is pursuing the question of science policies in a number of ways. First of all they have requested the governments

of member countries to write a five to ten thousand word report on the organization of scientific research in their country. These reports are to be written following a guideline laid down by the Committee for Scientific Research in June 1962. It was envisaged that the reports when complete would form the background for the periodic country reviews and also for establishing national science policies. The next step is the conference planned for August of this year. It is to be at ministerial level and will be aimed at convincing those government ministers responsible for science, of the importance and value of drawing up national science policies.

In encouraging international co-operation in research, several unique forms of co-operation have been devised. In the first place the Organization steers clear of research in those fields which have obvious immediate commercial value, and concentrates more on those topics where research must be carried out concurrently over a wide area, (as in atmospheric pollution) or where a large number of routine tests must be made (as in metal fatigue studies), or when expensive equipment is required (as with the low shaft blast furnace). Secondly the Organization does not set up its own laboratories but acts as a central service for functional co-operation making use of existing laboratories. At the time of my visit in January, there were thirty-eight co-operative research teams working under the aegis of OECD.

Another interest of the Committee for Scientific Research, and one that is basic to the whole subject of the relation between science and economic growth, is the measurement of this relationship. Although most economists realize that scientific research and development work do play an important part in economic growth, the actual measurements of R. and D. expenditures are in a confused and preliminary state. For example, one report I read recently pointed out that most countries still devote more attention to the measurement of the number of chickens they possess, their rate of lay and the price of eggs, than they do to the number of research scientists and technologists, their output and cost.

Realizing the lack of statistics and the importance of reaching some internationally standardized definitions, the Committee for Scientific Research decided at its January 1963 meeting to convene a working meeting on the measurement of scientific and technical activities. The meeting, scheduled to last a week, was to take place in June at a villa just outside Rome. The main purpose was to arrive at an agreement at a technical level on what and how scientific research and development expenditures should be measured, and how these statistics should be related to other economic indices.

Both the Department of Scientific and Industrial Research in Britain and the National Science Foundation in America have done pioneering work in this direction, but as far as I know this June meeting was the first time an effort has been made to reach international agreements. When all this has been sorted out it will be much easier to make meaningful comparisons on the amount of

scientific effort in different countries.

The Scientific Directorate also serves as a center for the collection of translations of Russian scientific and technical articles. It has plans to serve as a similar center for Chinese translations.

The OECD Scientific Directorate, led by its energetic Director, gave the impression of enthusiasm and activity, which is perhaps remarkable for an international organization. Its permanent staff is small in number, but its accomplishments are considerable and important. Its merits lie in having specific objectives, or, to put it crudely, it knows where it wants to go and has some pretty good ideas on how to get there.

The question arises, however, whether some of its activities in the international sphere are not more world wide than regional. Take for example, the study of the measurement of scientific activities. Only OECD member countries could participate in this, although certain other countries were invited to send observers. Yet to be really effective, all countries will need to adopt the conventions and definitions worked out at the Rome meeting. Other examples come to mind, and one wonders if perhaps UNESCO should have taken the initiative in these activities of world wide significance. Or have the United Nations organizations become so dominated by the less developed countries that they are unable to cope effectively with what, at the moment, are primarily the problems of the more developed countries?

Yours sincerely,

C.H.G. Oldham

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