

REVIEW SUPPLEMENT

Do Technical Reports belong to the Literature ?

OVER the years, it has become painfully apparent that the writing of technical reports has been one of the most rapidly growing components of the scientific enterprise. Largely because of the growth of organizations such as the United States Atomic Energy Commission and its counterparts elsewhere and the proliferation of technical advisory committees within the framework of the specialized agencies of the United Nations and their offshoots, the International Maritime Commission, for example, increasing numbers of scientists have been increasingly concerned with compiling technical reports. Some of these are humdrum documents, reviews of the literature in some narrow field, reports on particular experiments or calculations more suitable for the backs of envelopes than for the solemn stationery in which they are distributed. Some, however, turn out to be important and distinguished contributions to understanding, and the question arises how these are eventually to form part of the scientific literature. Those responsible for learned and scientific journals are increasingly aware of one important aspect of the problem, for there is what seems to be a growing stream of complaints from the authors of technical reports that their priority for some new idea or experiment has been stolen by the author of an article in the more familiar scientific literature. Nobody suggests that plagiarism has run riot, but there is no doubt that the publication of original results or ideas in technical reports is a professional hazard for many scientists.

What is to be done? Many governments have now made arrangements to ensure that technical reports which can be published are widely known in the professional community. In the United States, for example, the Department of Commerce circulates complete lists of all the documents available to the public, and makes selections of these by subject for monthly distribution. In Britain, the old Ministry of Technology sponsored similar arrangements which have so far been less fully worked out. The United Nations has, by comparison, a long way to go in providing full information about the technical reports that are available. On the face of things, however, the principle seems to be accepted by most of the authorities concerned that the technical reports should be made widely available wherever such questions as national security are not concerned, and that, of course, is as it should be. Whatever the defects of this vast and growing output of scientific literature, at least there is no reason why it should not be distributed to all who want to read it.

That said, however, there is a great need that technical reports made available for public sale should conform with at least some of the principles which regulate the proper parts of the scientific literature. In the nature of things, it is too much to ask that technical reports should be refereed. Their function is often that of conveying

from a laboratory to its headquarters organization information on some matter of mutual concern. And where a technical advisory committee of, say, the World Health Organization has done its best to describe the best way of tackling some problem in public health, it would plainly be absurd to expect that some other body of advisers should sit in judgment on what is published. But it would be possible, and immeasurably valuable, to insist that literature like this should be carefully related to the rest of the scientific literature. References should be complete (and usually they are scrappy, to say the best of them). Nomenclature, systems of units and even the construction of the text should follow accepted conventions. And is it too much to hope that those responsible for publishing technical reports should see that first of all they are properly edited, with the commas in the right places and with the prose honed down to what is necessary?

There remains the problem of knowing how best to sift from the technical literature those parts of it which are original. The authorities responsible for making it available tend to take the view that that is a task for the original authors. Let them, the argument goes, decide what deserves to be published. The trouble, of course, is that authors are often slow to seize what opportunities exist. They also are ambivalent about the status of technical reports. Are they literature or not, and does the publication of the essence of a technical report in a learned journal count as an example of that crime against the literature, multiple publication? (The short answer is that it need not, at least if the author is quick off the mark.) That said, however, it is beyond dispute that piecemeal publication of the literature of technical reports in a more orthodox form would not be a sufficient substitute for active dissemination of its content among the scientific community. This is why it is essential that public authorities responsible for technical reports should also, as a public service, arrange that the essence of this material is also published in suitable summarized form, possibly as more easily available and regularly published volumes, ideally to be sold not through government departments but by ordinary publishers. Over the years, the scientific community has come to think that the sources of primary publication should be supplemented by a healthy review literature. The need is more apparent and more urgent for the literature of technical reports.

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