

AUTUMN BOOKS SUPPLEMENT

Who will write more books?

BOOKS have an odd place in the scientific literature. The institution of the book, especially when bound in hard covers, still commands general respect. Most books, after all, are the products of hard work and devotion by one or a few people. And not merely authors but attempted authors know how lonely their work is, and how it may give hostages to fortune. Yet some books have a lasting influence. Newton's *Principia* and Darwin's *Origin of Species* are but the most conspicuous if almost hackneyed examples.

Books are also, however, widely suspected. And with some reason. Although few books are now published entirely without the benefit of external criticism, peer review does not apply as formally as to articles published in the journals. Often, indeed, the authors of books appear to shoulder responsibility for external review themselves, thanking a small group of friends for help and advice immediately before the ritual disclaimer in most prefaces that only the author should be blamed for the errors that survive. And while some publishers may take great pains to ensure that manuscripts are read with care, and revised if necessary, the procedures of formal review are not uniform either between publishers or books, and are rarely in any case explicit. This is the sense in which books are often regarded as peripheral to the scientific literature proper.

Accordingly there is a temptation among professional people to suppose that books are somehow half-way between Apocrypha and light entertainment, in contrast to the measure of respect accorded to at least some journals. Books, then, are at a disadvantage in professional esteem compared with articles in the journals — a sad reversal of the traditional opinion that printed books are in some permanent way the embodiment of scholarship. So journals now command the attention of authors, who are reluctant to put more than a few thousand words on paper. Moreover, the scorn of books as vehicles of scholarship is probably greater among scientists than among other professional scholars.

It is high time that this balance was redressed. The importance of the journals in the scientific literature will not easily be undermined, and there is no reason why it should be, whatever the prospects ahead for electronic publishing and the like: but the value of printed books, especially those by a single author or by a few close collaborators is now too little appreciated. The result is that people's natural disinclination to suffer the pains of authorship for no immediate recognition is strengthened. The symposium of reviews of books that appears on the following pages may persuade some whose disenchantment is not permanently rooted that these neglected scholarly forms do indeed require more careful nourishment.

The most important need is that the contribution of books not merely to the education of students but of contemporaries should be more widely appreciated. Although most professional people are aware in their own education of the influence of particular books which seemed at first to be a means of coming to grips with some body of knowledge, and which later turned out to be a lasting challenge, it is now all too common that students, even undergraduates, are provided not with a book but with a list of references to articles in the journals (or even, illegally, with copies of them) and invited to make up their own books in their heads. By way of justification, it is often argued that this practice not merely teaches students about their subjects but that it also enables them to understand what research is like. This, however, is a thin excuse for many teachers' laziness.

A good textbook differs from the most carefully chosen set of

references in several obvious but nevertheless crucial ways. First, it will have a sense of history that cannot be conveyed by a list of dates. Second, it will judiciously assess the importance of contributions to some field of study. But it will also be challenging, stimulating and — ideally — original. Even in the most rapidly changing fields, good books for students have an element of reflectiveness of necessity absent from articles in journals. The appearance of Feynman's *Lectures in Physics* in the 1950s was a good illustration of how the very best textbooks become required reading for fellow-teachers as well as students. But, teachers will complain, good up-to-date textbooks simply do not exist in quickly moving fields. The remedy, they must know, is in their own hands, or pens.

Another common complaint is that there are too few scholarly reviews in the scientific literature. Over the years, especially in the United States, a succession of committees has considered how to encourage working scientists to withdraw for a time from the bench or the competition for space in the ordinary journals to distil their knowledge of a field or topic into a reflective review. Several remedies have been suggested. Review journals might help. So might fees for authors. In some fields these policies have worked well, sometimes commercially — without the need of subsidy. The results are widely appreciated, not only by people reading their way into a subject but by the scientific community as a whole. Yet the argument that there should be more reviews, and that scientists should be more willing to produce them, is only a part of the much stronger argument that there is an urgent need of more books, and that they too are a charge on people's professional responsibility. For books have the advantage over journals that they are — at least soon after publication — more accessible, more portable and more memorable. But who except professional scientists can meet the need to which they so often draw attention?

These didactic goals are the bread and butter of scholarship. But are the monumental books differently conceived? Not necessarily. Newton's *Principia*, indeed, reads as if it were a textbook, with its lemmas, theorems and the like; it was, after all, intended to instruct. And it is easy to see how the *Origin of Species* might have begun as a scholarly review of what was known, in the mid-nineteenth century, of the relationships between species. But in the end the result was a thesis. The moral is that even quite pedantic exercises in authorship may turn out to help to change the world. That is part of the fun, now apparently much neglected.

For many people, however, the potential excitement of authorship is outweighed by what are often considered to be the dangers inseparable from books. For books lend themselves to reflectiveness and also, unfortunately, to discursiveness. Thus they tempt authors into subjective judgements of other people's work, even to speculation. Is that not a temptation to resist, potential authors ask themselves? And is it not in any case dangerous to be published in a format which, it is well-known, includes much unfounded speculation hung loosely on a mass of unreferenced data, unestablished assumption and tendentious argument? The implied criticisms are unfortunately occasionally applicable. The conclusion is not, however, that all books are bad but merely that some are bad. Others, everybody knows, are at the other end of the spectrum. And their absence would impoverish the scientific literature as a whole. Is it not therefore time that the scientific community stopped complaining about the scientific literature and instead set about adding to the quality of that part of it which has been most neglected in the past few decades?