to be necessary to make a journal viable.

As Bernal predicted, the "computing machine" does indeed provide direct communication. With ever-improving networks and computer mail, information and files flow backwards and forwards between scientists throughout the world. We sit at our terminals and read articles from Journal of the American Chemical Society or Macromolecules. Nevertheless there are still many scientists who, however comfortable the chair, have no wish to absorb information from a visual display unit or a tatty print out. Where the computer has become indispensable is for the retrieval of scientific literature. An explosion that has been even more dramatic than that of printed literature is that of online databases. In 1970 there were only a handful - today there are between 3,000 and 3,500, and approximately 450 "hosts" that operate them. This new technology is expanding the capabilities of libraries which, having had to cut their own acquisitions, have now much better access to a wide range of journals held by other libraries. With the help of online bibliographic retrieval scientists are made aware of articles published in less well known journals. Libraries spend more every year to buy a decreasing percentage of the scientific output, but with the help of computer technology scientists can be kept informed of new publications, holding libraries can be located and copies ordered online. The electronic text delivery systems that are being developed will reduce document delivery times to hours and minutes rather than days and weeks.

It will be interesting to see how the library looks in the year 2000. So far, for all its power, electronic communication has not supplanted conventional journals and several features of life in the library could well remain. It would be sad if we no longer received in paper form those journals which sit in neat matching rows starting with volume 1. But will there be the same daily irritations associated with printed material? For instance finding that the journals which arrived this morning have, within hours, been transformed into loose-leaf format ("gluing" is cheaper than "sewing"!); that the issue containing hot news on the latest oncogene has disappeared; that one journal, that shall be nameless, no longer issues the indexes separately but glues them firmly into the next volume (this index must be photocopied, for what librarian would dream of tearing a journal to pieces to extract the index?). I suspect so. For while prophets continue to predict the apocalypse, we are just writing off, with librarian-like gullibility, for sample copies of all those "indispensable" journals due to appear this autumn.

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New journals June 1984 to May 1985

CRITERIA for journals to be considered for review in this issue were circulated to publishers earlier this year, and were also published in *Nature*. They were that:

(i) the first number appeared, or the journal was re-titled, between June 1984 and May 1985 (although journals not covered in last year's review issue were also considered);*

(ii) the journal is published at least three times a year;

(iii) the main language used is English;

(iv) where possible at least four issues should be made available for review, including the first and the most recent numbers.

Last year's journals review supplement covered publications appearing between June 1983 and May 1984 and the second cut-off date, May 1985, allows for enough issues of a journal to have been published for a reasonable sample to be available for judgement (most are quarterlies). A

*See *Nature* **317**, 293–308 (1985). For previous journals review supplements see *Nature* **311**, 309–330 (1984); **305**, 477–497 (1983); **299**, 491–514 (1982); and **293**, 341–369 (1981).

spread of four different issues is taken as the usual minimum on which reviewers' comments can be based.

Several journals thought to satisfy the above criteria were not submitted for review, or arrived too late for inclusion. It proved difficult to find reviewers for other, doubtless worthy journals, while some titles were considered to be of marginal interest to *Nature's* audience.

The brief given to reviewers was to limit themselves to comment on the publications sent to them, and to avoid discussion of general questions of periodical publishing. Opinions expressed in the reviews are based on a sample, and apply to mid-1986 at the latest. As in previous years, the preponderance of journals in the biological sciences reflects the bias of material submitted for review.

Details of editors and frequency of publication, and the subscription rates appearing at the top of each review, are given in most instances for 1987. This information is not complete in all cases, and readers interested in subscribing to a particular journal should check the rates with the publisher concerned.

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