

Every week thousands of scientists write for reprints. The topic of reprints continues to occupy the letters column of many journals, but I see no point in reviewing that literature here. Most people agree that a problem exists.<sup>1</sup> And recent increases in postal rates have made further discussion even more relevant.

Let's suppose that each of 150,000 CC® readers writes for two reprints each week—an extremely conservative estimate. Suppose that half go to domestic colleagues and half to foreign. In the U. S., first-class post-cards are used for "domestic" requests and airmail post-cards for the "foreign." The resulting postage cost alone is about \$30,000 per week.

The cost of acknowledging and/or filling the requests can't be less than the cost of making them. The cards must be received in mail rooms, sorted and directed to proper departments and laboratories. Specific reprints must be retrieved, envelopes addressed and stamped, etc. Indeed, that some organizations provide pre-addressed post-paid envelopes or use methods like *Request-A-Print*® cards September 6, 1972

merely emphasizes the known cost to authors in the reprint exchange process. Self-addressed media shift to the requester some of the cost normally accepted by the author. At least *Request-A-Print* saves both parties some time. Finally, there is the cost of the reprint itself which cannot be eliminated unless we abolish reprints altogether.

Ignoring that it really costs more to send out a reprint than to request one, let's conservatively say that the cost of filling a reprint request is equal to the cost of making it. The cost of this reprint exchange business comes now to a respectable (but still conservative) \$6.0 million per year. We have restricted this estimate to CC readers, who have frequently reported that about 50% of the reprint requests they receive are due to CC itself. So the true cost of the worldwide reprint exchange might readily be estimated at \$10.0 million per year. Clearly this indicates that even a partial solution to this problem can be translated into a real cost-benefit to the taxpayer who ultimately picks up the tab for this system. For the busy scientist such a solution can become a valuable timehenefit.

Clearly the reprint exchange system is big business, as is world-wide R&D. It is also a curious survivor of the private correspondence system used by Renaissance gentlemen scientists who "reported" their findings in longhand to members of an invisible college. Replaced by an elaborate billion-dollar journal publishing apparatus, the original learned society journal has come a long way. But the basic process hadn't otherwise changed much when the Xerox machine came along. But surprisingly, copying machines have in some respects engendered even more reprint exchanging because the process fosters more communication. It is, as Goffman describes scientific communication, an epidemiologic phenomenon.<sup>2</sup>

There is a certain ego-gratification in the reprint business, to be sure. The reprint request itself somehow indicates that the requester is interested in your work and wants you to know that. In turn, most authors do not tell requesters they could read the article in a library. Reprints are, after all, a form of public relations and there is nothing wrong in that. Most of us mail out reprints in answer to any request. Indeed, lengthy mailing lists are maintained by reprint exchangers. It it not unusual for an author to require 2,000 reprints of a single article.

Reprint exchange may seem patently absurd to the purist who regards journal articles merely as a means of reporting scientific information. That is a somewhat naive conception of the scientist and his needs for ego-gratification and peer judgment.

But now, ironically, reprint exchange, a practice that learned journals should have made unnecessary, provides the scientist a solution to the problem created by the superabundance of journals. Private correspondence could deliver only so much. The publication establishment delivers too much! Reprint exchange provides a physical realization of the "personalized" journal.<sup>3,4</sup> And although many ISI® products and services facilitate the "personalized" journal, they do not as yet provide a specific mechanism for expediting, indeed stimulating, the reprint exchange process in an efficient manner.

We do, of course, provide author addresses in *Current Contents*, and we shall be adding them soon to  $ASCA^{\textcircled{B}}$ reports. ISI products and services offer an alternative to reprint exchange, but I have never imagined that they would ever be accepted as a replacement for it. The practice is not only too well entrenched, but its underlying cause is sociological, not scientific or managerial. The average scientist will use an *OATS* or *ASCA-matic* service only when he is desperately in a hurry to obtain an article or when he may indeed prefer to remain anonymous to its author!

Therefore, although we provide an economic alternative to reprints or interlibrary loans when scientific information is the sole requirement, we must recognize and even foster the process that users prefer. There are at least two solutions to the problem. A long-term amelioration is, I believe, to be found in the daily "newspaper" of science that I proposed almost ten years ago. I will be saying more about this in the months to come. A short-term approach to the reprint exchange problem is, I believe, to be found in an ISI Reprint Expediting Service. In the near future I shall describe Project REX---solution "extraordinaire."

- 1. Schneider, J. H. Reprint clearinghouse. Science 165:126, 1969.
- 2. Goffman, W. & Newill, V. A. Generalization of epidemic theory; an application to the transmission of ideas. *Nature* 204:225-228, 1964.
- 3. Garfield, E. ASCA-matic, the personalized journal. Current Contents No. 31, July 30, 1968, p. 5.