

ISI has already begun the research necessary to identify, collect, publish and market a core collection of heavily-cited articles. Our cost estimates will be based on two important assumptions: that ISI would properly compensate publishers for use of their copyrighted materials, and that librarians providing hard-copy service of copyrighted materials would also compensate publishers.

In closing, I should like to call your attention to a letter published over 3 years ago:¹⁰

BRADFORD'S LAW

Sir, — In considering the application of Bradford's Law of Dispersion (Fairthorne A. J. *Doc.* 25:319, 1969) as a guide to acquisition policy in the research library or information centre it is pleasant to contemplate a bibliophilic Utopia of a complete collection in a library with unlimited space and acquisition funds. Utopias are rarely found, however, and the library *does* have limited resources. Given this restriction, the librarian or acquisitions specialist, in even the largest and most pecunious libraries, must make choices. These choices are rational only to the extent that the library collection maximises the timely provision of requested documents to the satisfaction of the largest number.

In this light, A. Faser's letter (*Nature* 227:101, 1970) suggesting that a library is derelict in not purchasing a specialized journal of interest to only one user treats the occasional request with the same degree of importance as the ongoing demand for the heavily used journals. An inventory policy in a department or food store, parts-supply depot, manufacturing concern or library, based on ignoring frequency-of-demand distributions, leads to inefficient allocation of resources. Designers of sewer and flood control systems know they cannot design economic drainpipe and culvert systems of sufficient capacity to handle the runoff from the one-in-a-thousand chance that rainfall will exceed, say, 6 inches in any 1 h period.

And mass merchandisers stock only a few or no items in the extremely low and high size ranges of shoes, hats and all attire in between.

Bradford's Law promulgates that a library can supply *most* of the requests for material with a *relatively modest inventory* of book and journal titles, geared to the *normal* pattern of demand. This demand pattern is one in which a relatively few items from among all possible items in the inventory satisfy a majority of the actual transactions. Progressively fewer transactions are satisfied from the balance of the inventory, or from further augmentation of the number of titles held. Abiding by the Bradford distribution, then, is an important factor in the library's overall success at demand-fulfilment.

The most efficient way for a library to exploit its collection and maximize utilization of its document file is to share its bibliographic resources with as many patrons as possible. It cannot *reasonably* be expected to serve *every* individual request. Carried to the extreme, if the only requests were one-time requests, there could not be an *economic* central library. The most efficient way of handling such a situation would be for each individual to have his own private collection.

Yours faithfully,

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Many scientists assume that librarians make no judgments whatsoever in journal selection — that they are a captive market. It is true that many librarians have been guilty of poor administration of their journal collection — but it is true also that they have had only a minimum of hard data to work with. Fortunately, it is now possible to distinguish among books and journals — with accuracy, precision, and objectivity — and thus it is possible to make more scientific decisions.

1. Paper presented at the Associated Colleges of the Midwest Conference on Space, Growth and Performance Problems of College and University Libraries, Chicago, 17-18 April 1975.
2. Gore D. Zero growth for the college library. *College Management* 9:12-14, August/September 1974.
3. Williams J F & Pings V M. *A study of the access to the scholarly record from a hospital health science core collection*. Library and Information Service Center Reports. (Detroit: Wayne State University School of Medicine Report No. 54, January 1970).
4. Bradford S C. *Documentation*. (Washington, D.C.: Public Affairs Press, 1950), 156 pp.
5. Garfield E. Citation analysis as a tool in journal evaluation. *Science* 178:471-79, 1972. Reprinted in: *Current Contents*®(CC®) No. 6, 7 February 1973, p. 7-24.
6. ———. The mystery of the transposed journal lists; wherein Bradford's law of scattering is generalized according to Garfield's law of concentration. *CC*No. 31, 4 August 1971, p. 5-6.
7. Halbert M H & Ackoff R L. An operations research study of the dissemination of scientific information. In: *Proceedings of the International Conference on Scientific Information, Washington, D.C., November 16-21, 1958*. 2 vols., 1637 pp. (Washington, D.C.: National Academy of Sciences — National Research Council, 1959), vol. 1, p. 97-130.
8. Price D J D. Networks of scientific papers. *Science* 149:510-15, 1965.
9. Line M B, Sandison A & MacGregor J. *Patterns of citations to articles within journals; a preliminary test of scatter, concentration and obsolescence*. Bath University Reports. (Bath: Bath University Library Report No. 2, October 1972), 33 pp., ISBN 0 900843 27 6.
10. Weinstock M. Bradford's law. [Letter to the editor of] *Nature* 233:434, 1971.