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BOOK REVIEWS

M. Casey (Ed.), *Applications of Networking in Irish Libraries.* Department of Library and Information Studies, University College, Dublin, 1981.

This book contains a collection of papers presented at a conference held at University College Dublin on 14th March 1980. The main contributors are all closely associated with libraries, their data communication networks, and their computer systems, and the papers are clearly intended for others in the general field of libraries and information systems. Nonetheless, a wider, more general public will also appreciate them.

It may come as a surprise to the lay reader that the subject matter — now clearly of great importance to information providers — is so far removed from the traditional library image. What the book describes is the tip of an iceberg of change in the technology used to store and access information. The papers provide an insight into the way the computer and communications revolution is affecting this traditional field.

At present the main applications of the new technology are centralized cataloguing and on-line information retrieval. The smaller volumes of actively used 'derived' information which these require can be handled very cost-effectively by computer systems. Centralized cataloguing is now used widely, with significant savings in manpower and, hopefully, a more up-to-date and accurate service to the library's users. Where information retrieval is concerned, many factors favour the very large network. It has a marked economy of scale as it can serve sufficient users to make the provision of infrequently-accessed information economically viable. Conversely, the users of these systems are using them because of the comprehensive coverage they provide.

It comes as a considerable shock to realize how dependent we are all becoming on a small number of large centres. Information stored in a few large computer systems is vastly more vulnerable than that kept in a multitude of traditional libraries. For the present the danger of catastrophic loss of information may not seem great because the primary sources are still conventional books or journals: increasingly, however, much of the information of commerce, government and industry is held primarily as computer databases.

To summarize, this book is not about the latest technicalities of data networks and computer communications, but it would be a reasonable introduction for librarians and others, and it does give a good idea of the actual state-of-the-art in libraries at present. The two papers by Lucy Tedd are particularly good in this respect. Its wider interest is that it shows how a traditionally conservative branch of the information business is adapting to the opportunities of international data communications, and how rapid and far reaching the changes are. In this connection, Barry Mahon provides some background to the Euronet Diane information retrieval project. The other papers (by Dennis Jennings and Patrick Kelly) deal with the networking situation in Ireland. The specific details are of

mainly local interest, but this work does show what type of project can be attempted without requiring very large funds.

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P. Hills (Ed.), *The Future of the Printed Word: The Impact and Implications of the New Communications Technology.* London: Frances Pinter (Publishers) Limited. 1981. 172 pp. £10.00.

The application of computer technology has moved in 30 years from the 'fast calculating machine' stage to providing the essential nucleus of so many systems and services that one almost takes for granted that it can be applied to all fields of information processing. Only recently, however, has the mixture of science and craft evolved to the state where the processes of storing, finding, moving and presenting natural language material can be regarded as 'well understood' — and there has been a rush of new developments and a rapid increase in the number of aspects of electronic technology found to be relevant.

These well chosen 'readings' set out to provide a review of what is happening now, and will be likely to happen next, in those fields where the 'printed word' is important. The papers should be accessible to the general reader with some understanding of information processing; they will be particularly valuable to students of information science and of communications technology; specialists in the field may well find the broad review useful, and will probably appreciate the references to recently published work.

It is perhaps unfair to choose particular papers for comment, but for the reviewer the following were of particular interest: Maurice Line on 'Some questions concerning the unprinted word' provides an interesting general review of the principles involved in the adaptation to new technology. Patricia Wright in two articles on 'The design of official information' analyses this important field constructively, taking particular account of the need for skilled handling of interfaces with the 'clients' of the systems. The two articles also provide a useful 'testing ground' for views advanced in the rest of the book. Linda Reynolds has contributed a short review of recent work in graphic design for the new technology; this is complemented by a survey of new printing techniques by Yuri Gates, drawing on studies made by PIRA and PPITB. Other articles cover methods of forecasting, teaching systems, DIANE as a possible precursor of electronic publishing, microform, and economic and social aspects of the changes envisaged.

The editor envisages the present book as the beginning of an interactive discussion of the subjects involved, and encourages comments and observations for inclusion in a second edition. The reviewer would like to see more space given to newspapers and recreational reading. The question of the effect of new technology on the *structure* of published materials, touched on in several papers, might also be given more consideration.

J. H. Ashford

Information Technology: Research and Development

Aims and Scope

Information Technology: Research and Development is concerned with research into, and development of the use of technology for storing and accessing information. It will cover both theoretical and practical details of information storage and retrieval. In doing so it will attempt to bridge the gap between researcher and practitioner. The intention is to bring together in one journal papers dealing with research into the principles and methods of information storage and retrieval, and the development of implementation of technology for effective access. The journal is intended to cover a wide range of topics from the conceptual problems inherent in the automatic organisation of information to their resolution in new technology, and from basic theory to the embodiment of ideas in operational systems. It will cover such topics as theories of indexing and searching models for processes and structures in information retrieval, methodology of experimental studies and new developments in retrieval technology. It will also publish papers on the implementation details of specific systems, new technology, computer algorithms for information storage and retrieval, and new developments such as Viewdata, videodisk systems, word processing, graphical displays, etc. Papers on the management of libraries or information collections, or concerning traditional manual methods would not normally be appropriate.

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The title of the paper together with the name(s) and affiliation(s) of the author(s), and an abstract of 150–250 words should be given on a separate title page. The title should be repeated on page one of the manuscript.

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Heaps, H.S. (1978) *Information Retrieval: Computational and theoretical aspects*. New York: Academic Press.

(c) *papers from conference proceedings, etc.*
Hawkins, C.J.B. (1980) Developments in raw technology. *Microprocessors and intelligence*. (L.J. Anthony, ed.) pp 1–14. London: ASLIB.

(d) *research report*
Manola, F. and Hsiao, D.K. (1973) *A model for keyword based file structures and access*. Washington D.C.: Naval Research Laboratory (NRL Memorandum Report 2544).

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