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Computerised Information Retrieval System: Role of Minimal Level Cataloguing

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Abstract

This paper addresses some problems in cataloguing in two different technological contexts: printed card catalogues and online catalogues. Some of the current problems in cataloguing in the environment of online library catalogues have been reviewed and highlighted. In particular, minimal-level cataloguing as defined by Anglo-American Cataloguing Rules, has been discussed to the extent to which it can play an effective role in computerised information retrieval system. A number of research questions have also been suggested for further examination of role and prospects of minimal level cataloguing in the OPACs, and specifically its implications in computerised information retrieval system.

1. INTRODUCTION

Libraries and information centres with growing collection of books, serials and AV materials, such as microforms, computers, CD-ROMs and multimedia, etc., besides other non-book materials, are confronted with the problems of their bibliographic control, physical access and use. Where to house and how best to service these materials? Should they be circulated or restricted to in-house use? How should one catalogue them? What method should be used to provide for their custodial maintenance and prevention?

One of the recent solutions to many of these cataloguing problems, similar to those facing the Library of Congress in the 1940s, is found in the proposal commonly referred to as minimal level cataloguing (MLC). MLC is also known under the headings of short cataloguing, brief record cataloguing, simplified cataloguing and less than full cataloguing. In 1978, Library of Congress introduced MLC as a means to combat crisis in cataloguing, stating that some access is better than none.

After more than 10 years it was felt that since we have not learned as yet whether the provision for briefer records (of possibly more materials) is better than none, we read that MLC, in general "has been highly effective in providing such access through the online retrieval system by means of such elements of bibliographic description as author, title and series."

In this paper, we examine the problems in cataloguing in two different technological contexts: printed card catalogues and online catalogues. Then we review some of the problems in cataloguing in our own era of online public access catalogues (OPACs). In particular, we discuss the extent to which minimal level cataloguing can play an effective role in computerised information retrieval system.

2. MLC VIS-A-VIS ONLINE LIBRARY CATALOGUES

The recent growth of online bibliographic networks (e.g. OCLC, WLN, RLIN, UTLAS), the escalating cost of cataloguing entries, the use of MLC in machine readable cataloguing (MARC) records, and the Cataloguing-in Publication (CIP) Programme, have all highlighted the need for empirical research on the usefulness of MLC and on the relative merits of verifying levels of detail for describing and identifying materials.

Research is necessary to establish the needs of various categories of library users; how often they would make use of bibliographic elements and the purpose for which they would be using them. Lambrecht asks, "If 10 per cent of users and staff of the most sophisticated research libraries are unable to locate an item, distinguish it from very similar item, or determine needed details about it, has the catalogue served them well enough? Cutter... would not believe it had."

Lambrecht reminds us that the library literature of the period 1982-91 has witnessed numerous proposals which call for revaluation of the costs and benefits of full cataloguing; little progress, however, has been made in this direction to this date.

In 1991, Lambrecht surveyed 22 national cataloguing agencies to assess their practices and attitudes toward MLC. The survey indicated that only seven of the 22 national agencies included all mandatory ISBD data elements in all of their catalogued records and that only four of the 20 elements designated as mandatory in the ISBDs were considered of vital importance. Further, the statement of responsibility, place of publication, series title proper and edition statement of responsibility were considered the bare bones of description for new ISBD (MLC) practices.

The main purpose of MLC might be more than offset by the increased cost of providing local reference services to collections with inadequate bibliographic control.

In some of the most advanced online catalogues of large collections, users will typically retrieve some useful items from the collections in response to a given query, but they have no way of knowing what has not been retrieved. Handman persuasively argues that for media collections that are becoming "bibliographically accessible from remote locations, the lack of effective subject access means valuable resources potentially lost on the shelves forever." He shares anecdotal information that MLC records when searched on the University of California system wide online catalogue. MELVIL catalogues are virtually useless to the majority of users. This is in sharp contrast to the belief which was expressed ten years ago by Library of Congress: "Although represented by a less than full catalogue record, it was judged that the power of the online retrieval system would, to some extent, compensate."

Handman again said: "Even under the best of circumstances provided by the MELVIL catalogue, including to the hilt standard cataloguing; key word and Boolean searching; and format, date, language, and location limitation capabilities, our patrons frequently find themselves rudderless and listing in stormy bibliographic seas."

While some of the writers have offered different proposals to combat the crisis in cataloguing in 1970s and 1980s suggesting extension of the Linked System Project to the online exchange of bibliographic records among networks, and establishing shared cataloguing to cover special categories inadequately catalogued, others have experimented with their own in-house standards of what MLC should be.

3. MLC AND THE COMPUTERISED IRS

AACR-2 (1988) provides three levels of detail in the description as follows: First level of description, or 'minimal' (rev. rule I. OD1); second-level or 'core' (rev. rule I. OD2); and third level of description or 'full' (rev. rule I. OD3).

When accessing the catalogue online, the result of a search will either (a) be displayed on the VDU screen or (b) output to a printer. The former may be the only facility available, or alternatively the initial search results may be

viewed on the screen, and, when a satisfactory results has been obtained, a print out of the relevant entry of entries may be requested. The latter is obviously desirable. Some of the criteria, e.g., lay out, spacing, etc., are relevant in online information retrieval system. The screen should not be over-crowded; entries, if there is more than one displayed at a time, should be clearly distinguishable and particular elements within the entry should be identifiable.

Some questions which might be asked in connection with the above are:

(a) Is a single entry only to be displayed at any one time?

(b) If not, how are the entries to be separated?

(c) How much detail is to be included in a displayed entry?

(d) Is a choice of level of detail to be provided?

(e) Is a narrative, paragraph type display (as on a catalogue card) to be used or is a tabular form to be preferred?

(f) If a tabular form is to be used, are the various elements to be labelled?

As online catalogues have become more prevalent, Hildreth states: "Many librarians have urged catalogue planners and designers to retain the traditional main entry card format. These librarians feel that this format should at least be included among the alternatives available to the user, if not the 'standard' format in an online catalogue." But, as Hildreth, from whom this quote is taken, points out, this opinion "though popular is not universally shared" and many librarians see the traditional format as unsuitable in an online context. Recent studies recognise the importance of display format design and appeal to indicate that tabular or labelled formats of MLC are preferred to traditional or narrative lay outs by the users. Both the cataloguing formats have been shown opposite:

User friendly MLC display format permits multiple entries to be displayed simultaneously. Other fields, e.g., ISBN, etc., may be present in the record and searcheable, but can be suppressed in the display.

ILLUSTRATION

Catalogue entry shown here is in traditional AACR-2 format

Pandey, B.P.
Economic Botany/B.P. Pandey—Ist ed.—New Delhi: S. Chand, 1981
VIII, 803 p: ill.; 24 cm.
ISBN 1-219-0017-4
581.6

Tabular or labelled format of MLC

Title	*Economic Botany*
Author	Pandey, B.P.
Publisher	S. Chand
Year	1981
Class	581.6

One very interesting point noted in surveys regarding online catalogues and catalogue use is that it now becomes possible to examine the way in which the reader approaches and uses the catalogue without the reader being aware that he is being observed, i.e., by using the in-built capabilities of the machine. Clearly this makes for a more realistic and unbiased analysis. It could be ascertained, for instance, how many searches had been undertaken for a known item and how many for a subject.

4. WHETHER AACR?

Whether a catalogue is stored on optical disc or magnetic disc, "access techniques should be simple and easy to use, with both intellectual and physical manipulation held to an absolute minimum." Kilgour, from whom the above quote is taken, believes that with such catalogues it will not be necessary to have extensive descriptive cataloguing rule systems, such as the second edition of Anglo-American Cataloguing Rules. Other writers disagree that we must not give up almost 250 years of Anglo-American cataloguing service for technological sizzle. We must not limit the catalogue. We must exploit the new technology to enhance its proper performance of its essential, historic and traditional functions.

A study of full and short entry catalogues undertaken by the Centre for Catalogue Research at the University of Bath points to the advantages of the short entry, i.e., MLC and will doubtless encourage more libraries to use them in their online public access catalogues.

Whatever the view taken of MLC, Michael Gorman predicts, and also the author of this paper hopes that he is right, "there will never be an AACR-3. The next general cataloguing code will be a manual on how to create MARC records for the national online network. Those MARC records will be different to our present linear records as they will be multidimensional and based on authority file concepts such as those partially established in the WLN system.

5. SCOPE FOR FURTHER RESEARCH

With regard to retrieval tooling, we need to examine the following:

(a) Information seeking patterns and retrieval success rates of the user who uses OPAC where cataloguing records for books, serials, and other formats are integrated according to the conventional Anglo-American cataloguing practice.

(b) What inquiries do users bring to library collections most frequently?

(c) How do they actually search in OPACs to answer their needs?

(d) What are the most common types of errors which lead to aborted searches?

(e) How are broad searches modified? Is there an emerging pattern in the error behaviour for certain types of searches?

(f) How do we measure user's success in retrieving relevant information?

The ultimate goal is to design systems which would be compatible with users' seeking behaviour, level of search sophistication, and retrieval requirements. The subject access must be improved, i.e., the system should be designed to accommodate various searching levels and collect those entries that satisfy a given user's goal.

Research is needed to determine which data elements are necessary, desirable and essential, to represent library materials in OPACs in the contexts of the economic implications and users needs. We also need to understand which access points would be useful for different classes of users and how cost effective different levels of description are in view of a growing number of virtual repositories that are searcheable mostly. Among levels of details, we need to study the extent to which MLC core and full cataloguing might be cost effective in searching and retrieving the information.

6. CONCLUSION

Nobody can predict exactly what will happen in the next century but we can be sure that the impact of the computer will become ever more pronounced. These are exciting times for the catalogue producers. The function of the catalogue remains unaltered but the means of implementing that function grow ever more sophisticated and the basic function may ultimately be enhanced by an ability to retrieve not only relevant document citations but the actual documents themselves. The catalogue is a key to the doors of knowledge; in the past, it has not always been the most efficient of device, but, computerised, it should become a golden key with a golden future. Remember, that computer encourages the creative and innovative urge. In order to make full use of it, one must look beyond the restrictions of traditional cataloguing theory. Start afresh, think a new, the frontiers are boundless.

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