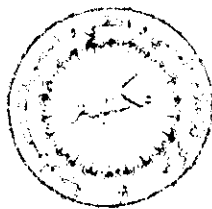


BIBLIOTHEQUE DU CERIST

MICROFORMS IN LIBRARIES

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INTRODUCTION

Background

It might have been better for microfilm if those often cited carrier pigeons had not flown from Paris to Bordeaux during the Franco-Prussian War carrying dispatches' on microfilm. As Rolland Stevens notes, for over fifty years "microfilming was regarded more as a stunt or a curiosity than a method for promoting scholarly, or, other serious activities."²

In addition to being looked upon as curious, microforms have also been regarded as mysterious which is odd when one considers the general acceptance of photography; somehow, when a page is reproduced on a frame of 35mm film, it's mysterious; when a person's likeness is reproduced on the same frame, it isn't. The latter process may not be understood but it's accepted.

Similarly, when 35mm film contains images of people, places, or events, it's simply a roll of film but when it contains images of pages, it's a roll of microfilm, even though the size of the film hasn't changed.

Microforms have also suffered from overly enthusiastic promoters touting low cost as an absolute whereas microforms are low in cost when compared to other methods of reproduction *provided that the number of copies to be distributed is low*. As the number of copies increase, the price advantage of microforms decreases. This can be seen without elaborate computations by comparing the price of a paperback against the price of a book of similar length in microform. This is, of course, a simplistic comparison but nevertheless a legitimate one from the consumer standpoint as it compares actual prices rather than theoretical ones. As Dan Lacy points out, "It [cost of printing, paper, binding] is also a cost subject to rather sharp reduction in long runs, as the cost of photographically reproduced microfiche is not. In fact the per-copy cost of printing and binding

a mass-market paperback is considerably less than that of reproducing the same images in microfiche."³

Espousers of microforms' "low cost" often tend to overlook composition and marketing costs and the fact that the cost of printing, paper, and binding (the costs microforms replace), "are among the smaller costs of publication, and will usually be no more than 15-to-20 percent of the retail cost of the book."⁴

"Hence," according to Lacy, "micropublishing in itself offers no prospect of significant savings as an alternative method of publishing individual books. The low price of most microfiche is derived not primarily from economies inherent in the micropublishing process, but from the fact that the materials micropublished exist in reproducible form in the public domain and therefore involve no royalties, editing or plant costs. The low price is also derived from the fact that micropublished products are usually large collections, series, or periodical sets sold as a unit and thereby avoiding the marketing costs of selling individual titles."⁵

Another myth, apparently due to the fact that many writers about microforms know little or nothing about libraries, is that microforms in libraries are held to be in dead storage and that scholarly research is somehow an inactive endeavour in contrast to, say, looking up insurance policies which is considered an "active" use of microforms. One writer, for example, notes, "By the 1950s, there was a widespread realization that microfilm could be used not only for the preservation of backfiles and oversized documents but as an integral part of *active* information systems as opposed to archival storage."⁶ Needless to say, if libraries only stored microforms they wouldn't be concerned with such things as cataloging, organization, reading equipment, user reactions, and the other topics discussed in this book, nor would scholars care about indexing and bibliographic control.

Hopefully this book will dispel some myths and shed some light on problems encountered by librarians and scholars in dealing with microforms.

Scope and Purpose

This book, compiled for librarians, deals with the traditional use of microforms in libraries—the publishing of scholarly and research materials. It does not cover newer uses such as library catalogs on microfilm or the utilization of computer output microfilm (COM). Nor does it cover ultrafiche as the two major efforts to date (NCR's PCMI Library Collections and Library Resources, Inc.'s, Microbook, have not been successful in the marketplace and it appears that ultrafiche will have no significant impact upon library microforms).⁷ As Frederick Lynden has noted, "the response of the library community to published microform libraries employing high

reduction film seems to signal slow progress towards the use of ultrafiche."⁸

The purpose of the book is to give both students and practicing librarians a basic understanding of all aspects of micropublishing as it applies to libraries. The emphasis is on library usage rather than microform technology, on the practical rather than the theoretical, on the present rather than the past. Most articles have been written in recent years. Some older ones have been included because of their importance in understanding today's problems.

Six major topics are covered: (1) Introduction to Microforms, which includes a brief history of micropublishing, microform orientation, and some articles on micropublishing; (2) Organizing the Microform Collection, which has sub-chapters on operational problems—acquisitions, cataloging, organization, hardware and storage; (3) Bibliographic Control, perhaps the overriding microform problem at the present time; (4) Applications; (5) Standards and Specifications, which includes a descriptive article on the importance of standards and two filming specifications, one for books/pamphlets and the other for newspapers; (6) User Reactions, an area overlooked in the past but one to which much attention has been paid of late.

Role of Microforms

Before proceeding it might be worthwhile to give consideration to some general aspects of the use of microforms by libraries.

Why do libraries use microforms? According to a 1974 survey by a micropublisher, saving space was the reason given by most respondents. Holmes, on the other hand, found, "to acquire materials not otherwise available,"⁹ as the major reason. Others include: (1) Instead of binding serials (journals are retained unbound for two to three years after publication, the period of heaviest use, and are then discarded and replaced by microform versions;¹⁰ (2) To preserve deteriorating materials; (3) Easing access to bulky materials such as newspapers; (4) To provide working copies of materials too delicate for continued use such as rare books; (5) To save money—in most cases the cost of an out-of-print set or serial backfile will be substantially less in microform than the cost of a full-size reprint or the cost of the original on the used book market; (6) Ease of acquisition—i.e., acquiring materials which would otherwise be difficult to acquire; (7) Mutilations reduced.

Among the emerging and future uses of microforms by libraries four stand out: (1) to replace book or card catalogs; (2) for preservation purposes as part of a systematic approach to preserving materials printed on poor paper which in time will deteriorate; (3) in non-circulating libraries where the collection is on fiche and duplicate copies are made and sold

(or given away) by the library in lieu of circulating; (4) to replace inter-library loan—instead of lending, the material is filmed and the film sold or given to the requesting library.

Problems Unique to Microforms

What problems do microforms present to libraries? (1) They require reading machines and patrons need to be instructed in the use of these machines; (2) Machines require maintenance; (3) Open access presents problems especially with microfiche; (4) It is difficult to place ownership identification on microforms; (5) Difficulties with cataloging, bibliographic control; (6) Microforms are more easily damaged in normal use than are full size library materials; (7) Difficulties in inspecting microforms to determine completeness, adherence to standards, etc.; (8) Too many formats, sizes, necessitating many different reading machines; (9) Books and other materials to be filmed vary in size from the pocket size book to the daily newspaper and type sizes from footnote to display making standards difficult to develop; (10) No agreement as to how microforms are to be counted for statistical purposes.

What problems do microforms present to students, scholars, and researchers? (1) They require reading machines which among other things tie the user down to a particular location; (2) Often reading machines are placed in undesirable locations—as Holmes notes, “reading machines are often placed in stack aisles where their users are often interrupted by other library patrons . . . dust and dirt are so bad in some cases that damage to both microforms and reading machines is commonplace,”¹¹ (3) Eye strain, although this appears more imagined than real—“Most complaints are made by the casual user. Experienced microform users seldom complain.”¹² (4) Underlining or marginal notes are not possible; (5) Browsing is considered difficult; (6) Use of more than one book at a time (i.e., referring back and forth) is difficult; (7) Charts, maps, and illustrations often difficult to read.

The Investment in Microforms

How much are libraries spending on micropublications and how large are libraries' microform holdings? According to Yerkes writing in 1972, “the number of libraries with microform collections is high but the collection sizes are low compared to the hardcopy volumes in these same libraries.”¹³ He estimates that by page count 4.5 percent of the collections of college and university libraries are in microform, 1.9 percent of public libraries serving populations over 25,000, and 5 percent of special libraries. Reichmann and Tharpe found a much higher ratio for university

libraries—"A substantial part of the holdings in United States libraries is on microform. The median ARL library in 1970 has 1,268,159 books and 355,490 units on microform. Thus, for every 100 printed books, the library had 28 microforms a ratio of less than four to one."¹⁴ 1972-73 statistics for 2,550 colleges and universities show 425 million volumes, 10 million microfilm reels, and 97 million other microform units for a total of 107 million microform units resulting in a similar four to one ratio.¹⁵ Reichmann and Tharpe expect the number of microforms issued to reach parity with printed books in the very near future; Holmes found an average growth rate of microform collections of 10 percent to 15 percent.¹⁶ According to the college and university library statistics we have cited, libraries added 600,000 reels of microfilm and one million other microform units to their collections between 1971-72 and 1972-73. Assuming an average price per reel of \$20.00 and an average price per unit of \$.60 for "other microform units" this would make the higher education micropublishing market \$18 million or approximately 5.7 percent of the \$315 million spent on books and other library materials, a percentage which I think is too low. According to Miller, "Academic libraries are now [1972] spending between \$25 million and \$40 million per year on microforms."¹⁷ My own educated guess would place the annual dollar volume for micropublications sold to all libraries at \$35 to \$45 million.

Which is better, positive or negative? This is one of those questions that I do not think can be answered definitively; it appears to be an entirely subjective matter. Positive microforms (black text, white background) outsell negatives in the library market. They resemble the printed page and are definitely better for photographs. Proponents of negative microforms feel that white images on a black background reduce glare and therefore eye fatigue. Scratches show up less on negative microforms. At one time reader-printers reversed polarity (a negative microform gave a positive print-out and vice-versa) so that if much enlarged copy was to be made, negative microforms were recommended, but now most reader-printers can go from negative to negative or positive to positive.

Which is the best microform? Again, there is no clear cut answer. Holmes found that, "a very large majority believed that roll microfilm should be used for miniaturizing serials, monographs, and manuscripts. These respondents also thought that microfiche was ideal for miniaturizing report literature. There was a general consensus that roll film, installed in cassettes for use in a suitable reading machine, would be highly desirable if the cost were not prohibitive."¹⁸

One thing that is clear is that no microform has been put completely out of business by another microform with the possible exception of the photographic micro-opaque, which has been largely supplanted by microfiche. This is unusual, as in similar circumstances the marketplace in time generally makes a choice. In the late 40s, for example, competing

approaches to the record album market, which until then had utilized 78 rpm records, came out. One used a 10" or 12" disc revolving at 33 1/3 rpm and the other used a smaller disc revolving at 45 rpm. Within a short time the marketplace clearly chose 33 1/3 rpm for albums; 45 rpm became the medium for singles and 78 rpm disappeared. But this has not happened with microforms apparently because the marketplace considers them equal (I use the "marketplace" because I trust it much more as an expression of sentiment than surveys). Even the often repeated view that roll film is good for serials and fiche for reports (i.e., one report per fiche) and that fiche present problems of file integrity does not hold up as a substantial number of serials and other long-run materials have been successfully sold on fiche. What you seem to find is vocal adherents to every microform, but an insufficient number for any one microform to become predominant.

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4. *Ibid.*, p. II-14.
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10. For a discussion of binding costs vs. replacement by microforms see Lyndon, op cit, pp. 18-19. The sources he cites give binding costs as ranging from \$3.85 to \$7.88 per volume and the preparation cost as \$2.75 per volume.
11. Holmes, op cit., p. 7.
12. *Ibid.*, p. 13.
13. Yerkes, Charles P., "Micropublishing Market," National Microfilm Association, *Proceedings*, 1972. Silver Springs, Md.: National Microfilm Association, 1972, p. II-29.
14. Reichmann, Felix, and Tharpe, Josephine, *Bibliographic Control of Microforms*. Westport: Greenwood, 1972, p. 4. Yerkes compared pages whereas Reichmann/Tharpe compared books to microform units, however, when the Reichmann/Tharpe figures are translated into pages the ratio remains four to one.

15. *The Bowker Annual of Library and Book Trade Information, 1973*. New York: Bowker, 1973, p. 299. It should be noted that comparing books to microform units is a poor comparison especially when "other microform units" are treated as equivalent to reels. The number of pages on a reel of microfilm varies considerably depending upon the size of the original material, the filming mode, and the reduction ratio, but I think a figure of 2500 pages is acceptable for calculations and this is substantially greater than the number of pages in most books. The number of pages on "other microform units," excluding ultrafiche, varies from approximately forty to 112, with seventy a reasonable figure to use for calculations and this is substantially less than the number of pages in most books.

16. Holmes, *op cit.*, p. 10.

17. Miller, Edward A., *Determination of the Administrative and Functional Characteristics of a National Microform Agency*. Washington: Association of Research Libraries, 1972, p. 14.

18. Holmes, *op cit.*, p. 9.