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Title: THE ROLE OF MICROFORM IN THE ACQUISITION AND
BIBLIOGRAPHIC CONTROL OF AFRICANA.

Sujet: ROLE DE LA 'MICROFORME' POUR L'ACQUISITION ET
LE CONTROLE BIBLIOGRAPHIQUE DE MATERIAUX AFRICAÏNS

Author/Auteur: Hans E. Panofsky

THE ROLE OF MICROFORM IN THE ACQUISITION AND
BIBLIOGRAPHIC CONTROL OF AFRICANA

by Hans E. Panofsky

Acquisition and bibliographic control of Africana presents a picture of increasing duplication of effort, incomplete and haphazard coverage, and fast deterioration of the material. Among the remedies that limit the size and consequences of this waste, microform ranks very high. The immediate benefits are naturally the reduction and preservation of the material but the dynamics brought about by this process embrace a vast series of effects that are of course obvious to everyone but are nonetheless solutions to great problems. First of all is the unlimited possibility of handling, and distributing the material; the unlimited possibility of reproducing primary sources and moving them to the site of research, oftentimes so remote from sources and large collections. (It has been remarked that such easy-to-come sources do not provide the overall atmosphere or ambiance that is thought to be essential to scholars who need familiarity with the original physical locus of the material.) Another effect is the opening up of a whole range of acquisitions which would otherwise be impossible. Besides the large national archives there are many rare and otherwise inaccessible collections. Now, the possibility of carrying out such enterprises has created favorable conditions for a long needed cooperation in the acquisition and distribution of Africana. It is, in fact, in matters of microfilm taking and storing that we have succeeded in forming cooperative associations. It is within the scope of this paper to examine the major microfilm holdings of Africana.

Technical aspects

It would be impossible to give a total picture of microfilm equipment and related operations here. Each country has different material and techniques at its disposal and the equipment can range from an ordinary camera to the most efficient laboratory and photography team. While the 35 mm camera has gained wide use for the filming of newspaper etc., it may well be preferable to use either a 16 mm camera (this can convert film into fiche) or attempt to secure a 105 mm step-and-repeat camera that in Chicago sells for no less than \$25,000. Few librarians are expert in photo-techniques yet they should be able to assess the quality of equipment and workmanship or at least be able to obtain competent and speedy advice, to ensure that the microproduction conforms to high standards which however, have not yet universally been agreed upon both with regard to format and to quality.

Pricing

There is a widely held feeling that microfilming is a rather cheap activity, at least per page. The actual cost per exposure ranges between $2\frac{1}{4}$ and $2\frac{1}{2}$ U.S. cents in non-commercial ventures to 5-6 cents in commercial ones. In newspapers, only one frame can be secured per exposure; in most monographs and journals two are possible. Expressed differently, the non-commercial costs range between \$25-\$35 per 100 feet of negative film depending on the reduction ratio, which should be 7-12:1 range, so that inexpensive readers can be used effectively. When the reduction ratio is a higher one, more exposures per foot will find place on negative of a given length, hence the price will be higher. The cost of positives is a direct function of length and is about \$6 per 100 feet of film. Or the ratio between negative and positive film is 4 or 5:1.(1)

(1) Information supplied by Gordon Williams former Chairman Copy Methods Section, American Library Association.

The difference of 1:2 in cost between commercial and non-commercial operations can often be accounted for, by the good profits made by microfilm concerns (now frequently the subsidiaries of large corporations), and also by the fact that much of the cost, salaries and overhead of non-commercial operations are frequently absorbed by the sponsoring institutions.

Unless the scale of non-commercial operation is a sufficiently large one, or, in the absence of realistic alternatives, "in town", a library, its university, or other parent institution should not lightly try to set up its own microfilm operation.

Copyright

One of the many reasons of possible difficulties is the question of copyright that may harrass an institution. By and large, the "fair use" principle has governed this matter in the United States and elsewhere. It is usually defined as one copy for scholarly use.(2) On April 28, 1967, the U.S. National Library of Medicine, which has been a pioneer in making available free microfilm copies in response to inquiry, has been challenged by a publisher of 48 medical journals requesting that the library charge 2¢ for each page copied from their journals. So far there is no indication of the firms' intention to sue the American government.(3)

With regard to the microfilming of Africana, Africanists in Europe and to some extent, in Africa possess material of interest to African Africanists. Increasingly the expatriate interest in Africana gives impetus to microfilming in Africa of material which is usually also needed there or in the other African countries. Microfilm has also made it possible, either in the form of film or hard-copy,(4) to recreate out-of-print books on demand.

The Shettima Kashim Library requested a microcopy of Paul Stauding's Im Herzen der Haussaländer....1889. This was paid by the requesting library. The master negative is held by the Cooperative African Microform Project (CAMP) a part of the Centre for Research Libraries (CRL) in Chicago and is available to Project members to make positives at cost and non members at cost plus $\frac{1}{3}$ of the cost of the negative. Unfortunately only a small proportion of entire books on microfilm is listed anywhere, and subsequent requests will result in the same or some other copy of the book being microfilmed a second time. The existence of a listed negative would of course greatly reduce the cost of reproduction.

Journals

The filming of particular journal titles may be considered ongoing commitments, seldom terminal ones. Libraries that are considered to have an interest in a journal will place a current subscription and hopefully will be able to purchase the back file in microform or as a reprint. A list of what some of us in the States consider basic journals has been filmed by the Library of Congress (LC). Twenty-two journals ranging from African Studies to Zaire are listed in the CAMP Inventory March 1967.(5)

No doubt more journals have been filmed (perhaps some of the same titles more than once) and many more should be preserved and disseminated in this manner. The filming itself should be given the widest possible publicity in order to reduce the cost by increasing the number of buyers and users.

- (2) Miles O. Price "Photocopying by librarians and copyright: a precis" Library Trends, 8, 3, January 1960 432-447. This entire issue edited by James E. Skipper is devoted to "Photoduplication in Libraries"
- (3) Northwestern Library News 31, 37, July 14, 1967 p. 2
- (4) University Microfilm charges $1\frac{1}{2}$ ¢ per page of positive film and $4\frac{1}{2}$ ¢ per page of hard copy (xerox) bound with an author title label. \$3 minima for both film and xerox.
- (5) The Centre for Research Libraries, Cooperative African Microform Project (CAMP) CAMP Holdings, March, 1967, 11 pages

The high cost of conventional journal publishing, even using photo offset, may perhaps be reduced by publishing in microform exclusively, as has been done by Wild Life Disease since its beginning in 1959.

Newspapers

For any understanding of contemporary Africa from the beginning of this century, newspapers are indispensable. Unfortunately far too few titles are properly preserved even in the editorial office of the newspaper. Newspapers, of course frequently merge and may then change title; sometimes they cease altogether.

African newspapers were about the first type of publication made available on microfilm. We can perhaps differentiate several series of operations, all still continuing. First there are those based on the holdings of the British Museum - a copy has been deposited with CAMP and those of the Foreign Newspaper Projects administered by CRL. Another are the African titles microfilmed by the Library of Congress. The principle is based on the sale of six copies.(6) Presumably when more libraries subscribe, these benefits accrue to the account of the Photoduplication Service of the Library of Congress rather than lead to price reduction for the subscribers. One commercial microfilm dealer (Microfile in Johannesburg)(7) has been active in providing long runs of South African Newspapers.

Imvo Zabatsundu, a weekly in English and Xhosa, published in Johannesburg, since 1884, has been microfilmed in Cape Town and the negative film, once the minor gaps have been filled, will be transferred from the University of California, Los Angeles, to CAMP with compensation to the former institution. Incidentally, the only record of Imvo in the United States is that produced on microfilm by the Library of Congress since 1962.

The East African Standard is being filmed in Nairobi. A complete set will be available at Syracuse University. It is hoped that IFAN in Dakar has carried out the microfilming of its excellent newspaper collection ordered by the University Library at Ibadan and the Hoover Institution on War, Revolution, and Peace.(8)

There is no easy way to determine which newspapers on Africa are available in microform. There are two sources. The Library of Congress' Newspapers on Microfilm sixth edition 1967 which lists a large number of titles and most helpfully indicates the location of both the negative and positive, even when the former is outside the United States. In this work, foreign countries are interfiled with the U.S.A. Nevertheless a mere 22 pages of the 487 total includes all African countries. Regrettably the Library of Congress's African Newspapers in selected American Libraries 3rd ed., 1965 merely indicates microfilm where applicable and not the location of the negative.

Gazettes

Gazettes are very bulky and except in rather specialized legal work, infrequently used. Somewhat more common reference is made to current issues of a gazette. Since 1959 The New York Public Library has microfilmed many national and local gazettes and positive microfilms are available for purchase from New York. For libraries in North America, membership of Association of Research Libraries (ARL) Official Gazette Project (\$81 per annum) may be advisable. This project is one of many administered by CRL.

- (6) "African Newspapers microfilming project" African Studies Bulletin, 4, 3, October, 1961 p.12
- (7) Aschenborn, H.J. comp. "South African newspapers and periodicals available on microfilm September 1963" Africana Newsletter, 2, 2, November 1964 pp. 48-51. Professor Feit of the Department of Government, University of Massachusetts seems to have purchased the entire newspaper output of Microfile.
- (8) Africana Newsletter, 2, 3, 1964, pp74-75

For some years the Library of Congress has had an African Parliamentary Microfilming Project (that is for countries South of the Sahara and excluding the Republic of South Africa). In 1963 (?), using as a base date the beginning of 1960 (except in the case of Ghana, Guinée and the Sudan where the survey began with the dates of independence), 65,000 pages were located. L.C.'s Photoduplication Service estimated the cost of these per subscriber would range between \$750 for three, \$525 for five and \$450 for nine. In 1966, going back to a base year of 1946, 500,000 pages were located. To date only the debates of the South West Africa Legislative Assembly, 1926-62 (nine reels) and possibly those of Southern Rhodesia have been filmed.

Micro-Methods in England are selectively filming British Parliamentary papers that have a bearing on Africa. They are working with the aid of a committee of the U.K. African Studies Association. In the United States "free enterprise" has resulted in an ill assorted package of "African Documents"(9) being merchandised with Library of Congress cards on the advice of a former university librarian with no particular knowledge of Africa. They are being filmed at a 20:1 reduction which is considered too high a reduction ratio for use on the less expensive microfilm readers.

Ephemera

The really exciting aspect of the work connected with Africana is the acquisition of what some refer to as "fugitive material" others as "ephemera" particularly of a highly political nature.(10) The Archive-Libraries Committee of the African Studies Association has been concerned since its formation in the late nineteen-fifties, with the collection and organization of this type of material which, by its own nature, tends to lie in scattered locations. Partially used and unrecorded, it accumulates in files of individual scholars. Let me cite the final phrase of a plea for cooperation written by Immanuel Wallerstein of Columbia University's Sociology Department: "All serious scholars should be, and I expect will be, ready to collaborate in pooling all primary source data which exists. Only in this way can knowledge be pursued most effectively."(11)

Unfortunately neither his nor larger collections have as yet been filmed. The present writer takes the blame for failing to follow up on a questionnaire mailed by the Library of Congress to fellows of the African Studies Association in 1963 to determine whether fellows of the Association had ephemera that they were willing to lend for microfilming. A good many had, and about half of these were willing to lend their material for microfilming. Negatives were to be sent to a central depository. To end on a more positive note, some political ephemera pertaining to the Congo, Cameroun and Zambia have been filmed and are available through CAMP. Inventories have been prepared and have either been issued separately or within the African Studies Bulletin.(12)

Dissertations

In 1962, the Library of Congress published A List of American Doctoral Dissertations on Africa.(13) Over seven hundred of them are listed and a microfilm order number is indicated for many of them. Doris M. Cruger has just compiled A list of American doctoral dissertations on Africa 1961/62-1964/65.(14) University Microfilms have placed 126,000 dissertations into

(9) UNESCO Bulletin for Libraries 21, 3, May-June 1967, pp. 163-4

(10) "African ephemeral material" Africana Newsletter, 1, 3, Summer, 1963 pp.4

(11) Ibid. p.4

(12) "Congo Ephemeral Material", African Studies Bulletin, 8, 2 September 1965 pp. 39-53

(13) Out of print, available as positive microfilm from Photoduplication Service of L.C. \$3.00

(14) Ann Arbor Michigan 48106, University Microfilm Library Services Xerox Corp. 1967.

a computer and one may, through a Key Word List, request a search to be made (5 dollars per inquiry including the first ten references ten cents for each additional reference). Micro Methods in Yorkshire lists some 31 theses available on microfilm or microfiche from British universities. Perhaps a search of master theses on Africa indicating their availability and microform nature may be worthwhile.(14a)

Archives

Reference to archives of former colonial powers will be made first and these will be taken in alphabetical order. The Belgian Fonds National de la Recherche Scientifique has, between 1958 and 1959, on the advice of their Commission Inter-Universitaire du Microfilme, microfilmed and prepared guides to the diplomatic and miscellaneous correspondence relative to the history of Belgium and the Congo conserved in the Public Record Office in London and at the London School of Oriental and African Studies (Mackinnon, etc. papers). The location of the negative film is uncertain, probably it is in Belgium. A positive copy is with CAMP.

Large sections of the archives of the Public Record Office have been filmed. They are conveniently listed in the Public Record Office (P.R.O.) Catalogue of Microfilms, 1967, and are available for purchase. The confidential prints, letters, dispatches, minutes and memoranda of the Foreign Office and Colonial Office between 1870 and 1914 are on microfilm at the Hoover Institution.(15) Microfilmed material from the P.R.O. is already at Yale and it is likely to be made available through CAMP. CAMP may also get a positive copy of films being produced as part of the "Oxford Colonial Records Project".(16)

Of the pamphlets relating to Africa emanating from the British Colonial Office, twenty-nine reels of negative and a loan positive are held at CRL or CAMP respectively. CAMP is also the owner of the negative microfilm guide to the Colonial Office East Africa series, called a "rough working check-list" by its modest compiler Cyril Ehrlich.(17) It should be considered for purchase by librarians who may not even have the East Africa series, let alone the book catalogue to the Colonial Office Library. As far as the French are concerned, the present writer believes that a grand project for microfilming French colonial records is on its way but no details could be gathered as yet.(18)

With regard to the Germans, most filming seems to have taken place when control over their archives was temporarily in the hands of others.(19)

(14a) University Microfilms has since 1962 issued Master Abstracts of selected master theses in microfilm.

(15) Peter Duignan, Handbook of American resources for African Studies, Stanford University, The Hoover Institution on War, Revolution, and Peace, 1967, 198 pp. Hoover Institution Bibliographic Series: 29

(16) Bulletin of the African Studies Association of the United Kingdom no. 2, May 1964 pp. 18-22

(17) The nine negative reels for the East African Pamphlet series are held by the University of California, Berkeley

(18) Comments of J.F. Maurel to me in Dakar in 1961 see also G. Wellesley Johnson, Jr. "The archival system of former French West Africa," African Studies Bulletin, 8, 1 April, 1965, pp. 48-58 particularly p. 58 paragraph 6.

(19) Duignan, op. cit. see also E. Presseisen and P. Duignan "The German foreign ministry archives and African material" Africana Newsletter 1, 1 October, 1962 pp. 6-7

Record Group 242 World War II collection of Seized Enemy Records including the archives of the German foreign office between 1920-1945 are available in part in microfilm from the U.S. National Archives. Guides have been prepared by Stanford University.

With regard to Portugal, there is a major source for those concerned with all Luso-Brazilian history, from at least the Portuguese point of view: Instituto Superior de Ciencias Sociais e Politica Ultramarina. Fimoteca Ultramarina Portuguesa. The films of all important documents, manuscripts, rare books, maps covering the activities of the Portuguese in the world and especially in Portuguese overseas territories will be gathered in the Fimoteca Ultramarina Portuguesa.(20) Inventories will be published of all manuscripts pertaining to Portuguese activity overseas.(21)

The original document will stay in the institution owning it. The negative and two positives will be made. One of the latter is to go to the archives of the Junta, the other to the Arquivos de Historia Ultramarina. The Junta seems willing to sell positives on demand. The selection of relevant material is facilitated by Boletim da Fimoteca Portuguesa, at least 30 volumes of which have appeared. No copies of these films seem to have reached the United States yet.

Some of the very important material on the nationalist movements of fighters against Portuguese domination has been collected by Ronald H. Chilcote and a microfilm prepared by the Hoover Institution, and just as important, a partial guide has been published.(22)

American archival resources on Africa are much larger than most persons would suspect. The records are concerned with American relations with Africa, consular, trade, and missionary as well as copies of papers where the originals are scattered in Europe and elsewhere. List of National Archives Microfilm Publication 1966 includes the general records of the Department of State, many of which have been microfilmed and partial guides of which exist.(23) Some of the records of other agencies of the U.S. government have also been microfilmed and contain material of interest to Africanists.

With regard to missionary archives that have a bearing on Africa and that can be consulted in America in microform, we should perhaps differentiate between American and other countries' missions.(24) Among the former is the United Presbyterian Mission Library. The Presbyterian Historical Society(25) catalogued and microfilmed the archives from the 1830's, when it was founded, to 1910, and is now microfilming the post-1910 archives. Prints of the 1830-1910 archives may be ordered. There are probably other mission records that have either been microfilmed or whose directors would be agreeable to having their records filmed should such a demand be voiced.

(20) In the Boletim 1, 1954 pp 3-7

(21) Ibid. p. 108

(22) "Nationalist documents on Portuguese Guinee and Cape Verde Islands and Mocambique" African Studies Bulletin 10, 1 April 1967 pp. 22-42

(23) Morris Rieger, who is preparing the Guide to Archives and manuscripts relating to Africana in The U.S. is also author of the very helpful section on the National Archives in Duignan's Guide pp. 59-98

(24) On the former see Duignan's Guide "Church and Missionary Libraries and Archives" pp. 137-173

(25) Ibid. p. 163 186, 553 exposures on 210 reels of (100 foot or less)

Among the non-American mission records of which a negative and loan positives are available in the United States the most significant ones are no doubt those of the Church Missionary Society. The microfilming unfortunately was done rather haphazardly at a time when a guide was only available for a part of the collection. It is not easy to use the existing guides for the microfilm collection and I am somewhat doubtful whether forthcoming guides will even be keyed to the reels of microfilm.(26)

A positive copy of the London Missionary Society Archives, pertaining to Africa, has been acquired by the University of California, Los Angeles. "Permission for use must be obtained from London".(27)

With regard to the Vatican Archives, no microfilming of Africana has yet been taken on any large scale or at least no records have come to my attention. The archives of Propaganda Fide are particularly important.(28) Perhaps an agreement can be reached to make this material available to scholars that cannot get to Rome.

Just as in the case of Germany, portions of the captured Italian archives were microfilmed and are available from the U.S. National Archives.

As to archival resources microfilmed in Africa, the situation as it pertains to East Africa is complex but hopeful. The Government of Kenya was fortunate to have D. Charman, Government Archivist, advise that priority be given to the microfilming of Annual and Quarterly Reports down to the District level.(29)

Fortunately the United States National Science Foundation made some funds available to Syracuse University for the purpose of filming them.(30) One hundred and fifty-seven reels of film have been produced including the debates of the legislative council and national assembly (1907-1965). One negative copy is in Kenya; another at present at Syracuse University in New York State. Residents of the United States will soon be able to use a loan positive or have positives or xerox copies made. Those from the rest of the globe will have to request films from the Kenya National Archives at \$10 a reel.

The Tanzania Archives are filming District Notebooks which are available for sale at a most reasonable price through the microfilm facilities of the University College, Dar es Salaam. CAMP, Northwestern University, and probably others are currently purchasing them. A guide to the District Notebooks is no doubt available in Tanzania. I am uncertain whether the sections of the Notebooks that are microfilmed are keyed into the guide or alternatively whether a reel of district notebooks is filmed and sold with a section of the guides.

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- (26) For a different and most helpful approach note: Thomas Karis, The Treason Trial in South Africa, a guide to the microfilm record of the Trial, Stanford University, (The Hoover Institution bibliographic series no. 23)
- (27) D.J. Harmon "London Missionary Archives at UCLA" Africana Newsletter 1, 4, Winter, 1963 pp 60-61
- (28) Gray, Richard, "Archives of the Vatican and the Propaganda Fide as a source for the history of West Africa", Bulletin of the Society of African Church History 1, 1 April 1963
Gray, Richard Materials for West African history in Italian Archives, University of London, Athlone Press, 1965 164p.
- (29) Kenya. Archives Microfilming Programme Sect. 1, Provincial and District Annual Reports, (1964), 75pp.
- (30) \$24,700 from the National Science Foundation, ACRL (Association of College and Research Libraries) News no. 3, May 1966, p. 56

A Uganda Government Archives Centre may emerge. Some microfilming of records from dispersed areas is already taking place through the efforts of the Institute of Public Administration. Unlike the Kenya and Tanzania ones, the Uganda archives have not yet reached America.

With regard to the archives microfilming programs in other parts of the continent, some are in the planning stage, some are in process, and others have been completed. These activities are of course first and foremost intended to serve a particular country or group of them. There is a possibility of cost sharing through the sale of positives; something that may or may not be desirable in the opinion of those holding records and hence the master negative. Be that as it may, it is hard to understand the reluctance of Ibadan University Library to sell copies of the Western Region Confidential prints and material on microfilm, and even more so the unwillingness of the Central African Archives in Salisbury to sell large sections at a time of the microfilmed portion of their archives. Some archivists feel that they can justify their budget by the number of personal visits. Mail order business hardly constitutes a personal search. What is perhaps more important, archivists feel that by spreading their wares they lose control over the quality of the historical and scholarly research that should really be undertaken by a local historian and his student.

Primary source material, not of a formal archive, is available from the Congo(31) through the good offices of a commercial microfiche firm, Research Publications NV in Leiden.

We have now surveyed most of the microfilm projects that are concerned with Africana. How could we cope more effectively with future needs and opportunities? We will need more microfilming or, more likely, microficheing at possibly greater reduction ratio integrated with information retrieval systems.

Converting text into microform does not in itself facilitate the retrieval of information. However microfiche lends itself to storage as well as transmission and projection over short and long distances and the ultimate recreation of the record on a screen as well as in hard form. Storage and retrieval is being undertaken by means of aperture cards which are too expensive for a large volume of material. We have not yet developed low cost microphotography of diverse source material that can be cheaply retrieved. At Northwestern University we have had several years of experience with MIRACODE, the acronym for "Microfilm Information Retrieval Access Code"

The basic components of the MIRACODE system are a special microfilm camera and microfilm reader. The system can store and retrieve individual pages of original documents according to one or more three-digit code numbers assigned to the input material. At the microfilming stage, the MIRACODE camera transforms the code numbers into machine-readable binary codes, which is loaded into magazines for convenient handling, per second at the MIRACODE retrieval station. Upon retrieval, the page image is projected on a ten by twelve inch viewing screen. Black-on-white photographic prints of projected pages can be produced by pressing a button on the microfilm reader. Depending on the amount of coding per image, several hundred pages of material can be stored on one 100 foot film magazine and searched for specified combinations of code numbers in ten seconds.(32)

(31) A part of the Collection of the Centre d'Etudes Politiques of the Institute de Recherche Economiques et Sociales of the University of Lovanium. Microfiched so far have been above all a collection of the Provincial "Comptes Rendus Analytiques". Newsletter of the Archives-Library Committee and Cooperative African Microform Project (NIALCAMP) No. 1, Northwestern University, April 1967 p. 5

(32) Janda, Kenneth, "Political research with MIRACODE: a 16 mm microfilm information retrieval system" Social Science Information 7, 2/3, April/June 1967 p. 170

As far as Africa is concerned there is a pressing need to establish in the near future national, and even better regional Documentation Centres. They should be part of the national or university library. The national centre may be started with the help of UNESCO, particularly its mobile microfilm unit. Since 1964 two units have been in existence. They have operated widely in Latin America, the West Indies and have also been to India and the United Arab Republic. One of the units will soon be in Ethiopia.

Recording past and current records on microform is necessary for preservation and dissemination. These functions can only be effectively carried out if bibliographic standards are improved, both for archival and non-archival material. The cataloguing for microform should be the same as for codex with additional indication of the nature of the microform and whether it is a negative or positive and if the latter, the location of the former. Bibliographies should not merely indicate if an item is on "microfilm" but must reproduce the collation of the original, indicating the number of pages, etc.

A country's records are one of its assets, in some African countries the archives are a part of the ministry of natural resources. An exchange of records is obviously feasible in support of scholarly ends between one country and another.

To do so, at the least possible cost, some form of a cooperative African microform centre seems desirable particularly for those countries that for the moment lack the ability to produce at low cost high quality positives film and hard-copy. If, say, the French have financed a microfilm program, they seem to have a right to acquire a negative for distribution in their country. All other countries would have to get their positives from the owner of the material or someone he designates.

CAMP, that some of us established in the States in 1963, is only too eager to become fully Africanized and for its American component to be merged with other projects of the Association of Research Libraries and the Centre for Research Libraries.

The role of commercial microform firms should be analagous to that of job printers. They should be allowed to bid for a particular job and then surrender the negative to the original purchaser. May I illustrate this further. Research Publications N.V.(33), formerly International Documentation Centre in Tumba, Sweden, has been a significant concern in manufacturing microfiches in various fields of study. This company has planned to film a suggested list of "Basic Collections in Microproduction - Africa" a long series of periodicals, newspapers, reference works, bibliographies, guides encyclopedias, indexes. They are willing to send a team to Africa, and to send camera units to places where local staff will be trained. The units will be donated provided that a small part of their capacity would be used for continued microproduction of certain material to be added to the collection. If at least 20 libraries subscribe to the complete set, and another 20 to partial sets, the annual subscription price would be less than \$2,440 for a complete set. Is this a reasonable and advantageous proposition? Can this efficiently equipped concern fulfill this task to everyone's advantage? One should ask why not pool the resources of the 20 or 40 libraries and commission, maybe to the same firm and so keep the ownership of the masters? We know that cost of cooperation is high even with the support of government or foundation money. But in this way there would be a free flow of exchanges of material from one library to the other without interference or merchandising from outside. This however requires that some possessive feelings of custodianship give way to a true spirit of cooperation and exchange.

Do we need yet another journal or newsletter besides national and subject bibliographies that should contain better information on items in microform? We do need somewhere a global listing of the kind that occasionally appears in the SCAUL Newsletter, the former Africana Newsletter or now the African Studies Bulletin or Library Materials on Africa (U.K.) We do not need detailed information such as a partial inventory reprinted from somewhere else but a concise description of the product in proper bibliographic form including price and place of availability. References to microprojects should be gathered consistently in one international journal so that scholars now and in the years to come may obtain complete and easily accessible information.(34)

(34) The National Register of Microform Masters issued by the Library of Congress since September 1965 can only be used in conjunction with the National Union Catalogue as most of the entries within the Register are arranged by L.C. card number or N.U.C. numbers.

RESUME

ROLE DE LA 'MICROFORME' POUR L'ACQUISITION ET LE CONTROLE BIBLIOGRAPHIQUE DE MATERIAUX AFRICAINS, par Hans E. Panofsky

La 'microforme' est envisagée ici en tant que moyen de réduire l'énorme duplication d'effort dans le domaine de l'acquisition des matériaux africains; elle est également envisagée comme une technique de conservation et de reproduction de matériaux qui se détériorent vite, comme une forme de contrôle bibliographique de matériaux fugitifs, enfin comme une occasion d'amorcer des opérations concertées entre les bibliothèques et les organismes de recherche. Ce n'est pas en soi une forme d'extraction (retrieval) des matériaux mais cela peut y mener. Un travail d'extraction de nature non élaborée est fait en liaison avec la codification des micro-reproductions et leur insertion dans les ordinateurs. De futurs systèmes d'extraction de nature plus élaborée prévoient l'usage de micro-reproductions par relais instantanés de radio et de télévision.

Les aspects techniques de la micro-reproduction sont très complexes en raison de la variété de l'équipement et des méthodes qui sont en mutation perpétuelle et reflètent l'état le plus récent des connaissances en matière mécanique et photographique. Plutôt que de s'attacher à cet aspect purement technique, le bibliothécaire est préoccupé de la spécification des critères de qualité en matière de micro-film, de l'établissement de critères internationaux en ce domaine, de la facilité d'interprétation du micro-film et de son utilisation par le grand public, des questions d'échelle de réduction du document, du prix de revient et des droits de reproduction. Autre question importante pour lui: comment établir et mener à bien des projets de micro-films? Faut-il que l'entreprise commerciale se charge de l'opération et conserve la haute main sur sa commercialisation, ou bien les entreprises de ce genre devraient-elles seulement exécuter les commandes passées par un groupe de bibliothèques à la façon d'un imprimeur travaillant pour un éditeur? Les prix hors commerce varient entre \$25 et \$35 par 100 ft (30 metres) de pellicule, somme qui varie selon le coefficient de réduction de l'image. La différence de prix entre les films dans le commerce et hors commerce est du simple au double.

Ce n'est que lorsqu'il s'agit de micro-films de grandes dimensions qu'une bibliothèque devrait se lancer dans une opération à son seul compte. La qualité de la reproduction est extrêmement liée au coût de l'équipement. L'appareil 105 mm (step-and-repeat) vendu par Bell and Howell coûte \$2,500 à Chicago.

En ce qui concerne les documents africains, nous avons constaté qu'au cours des dernières années l'intérêt des expatriés pour l'Afrique a donné un élan à la reproduction sur micro-films de documents généralement réclamés sur place et dans d'autres pays africains. A ce jour, la reproduction s'est concentrée sur les périodiques, les journaux, les matériaux éphémères les thèses de doctorat et tous les documents d'archives fondamentaux. Au stade de la reproduction du micro-film l'activité est grande alors que peu a été fait en ce qui concerne le contrôle bibliographique des matériaux micro-filmés. Même le catalogage est éparpillé et discontinu. Le seul guide existant est le 'Register of Microform Masters' établi par la Bibliothèque du Congrès, mais qui ne peut être utilisé qu'en conjonction avec le National Union Catalog.

Parmi les grands projets de reproduction sur microfilms de matériaux africains réalisés à cette date, il faut citer la reproduction sur micro-films de 22 périodiques de base par la Bibliothèque du Congrès. (Il se peut que cette dernière filme également les débats parlementaires.) Sont également à citer le Foreign Newspaper Project mené par le Centre for Research Libraries et la reproduction des journaux officiels par la New York Public Library. La reproduction des archives a été menée sur une grande échelle au Kenya et plus modestement en Tanzanie. Les archives

portugaises, belges et britanniques ont été partiellement micro-filmées. Afin de rendre plus accessible aux africanistes américains le maximum de matériaux de recherche, quelques-unes des plus importantes bibliothèques ont créé un fonds commun en vue de financer des commandes de micro-films ou des achats de micro-films déjà existants. Cette activité, menée par le 'Center for Research Libraries' à Chicago, est connue sous le nom de Cooperative African Microform Project (CAMP). Toutes les bibliothèques peuvent demander à en faire partie.

Les organismes qui lancent des projets de micro-films devraient étudier les possibilités d'action concertée, envisager la création d'un fonds commun de négatifs, ou tout au moins rendre l'information accessible par les organes bibliographiques appropriés.

Les aspects techniques de la micro-reproduction sont très complexes en raison de la variété de l'équipement et des méthodes qui sont en utilisation permanente et constante. Il est donc difficile de donner des conseils généraux sur les aspects techniques de la micro-reproduction. Cependant, il est possible de donner quelques conseils généraux qui s'appliquent à la plupart des techniques de micro-reproduction. Les bibliothécaires qui s'intéressent à la micro-reproduction de qualité doivent se renseigner sur les possibilités de micro-film de qualité de leur pays et de leur région. Ils doivent également se renseigner sur les possibilités de micro-film de qualité de leur pays et de leur région. Ils doivent également se renseigner sur les possibilités de micro-film de qualité de leur pays et de leur région.

La micro-reproduction de documents anciens est une tâche complexe et coûteuse. Elle nécessite un équipement spécialisé et une expertise technique. Les bibliothécaires qui s'intéressent à la micro-reproduction de documents anciens doivent se renseigner sur les possibilités de micro-film de qualité de leur pays et de leur région. Ils doivent également se renseigner sur les possibilités de micro-film de qualité de leur pays et de leur région.

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