



6-1-1983

### Preservation of East Asian Language Materials at the Library of Congress

Warren M. Tsuneishi

Follow this and additional works at: <https://scholarsarchive.byu.edu/jeal>

---

#### BYU ScholarsArchive Citation

Tsuneishi, Warren M. (1983) "Preservation of East Asian Language Materials at the Library of Congress," *Journal of East Asian Libraries*: Vol. 1983 : No. 70 , Article 3.

Available at: <https://scholarsarchive.byu.edu/jeal/vol1983/iss70/3>

This Article is brought to you for free and open access by the Journals at BYU ScholarsArchive. It has been accepted for inclusion in *Journal of East Asian Libraries* by an authorized editor of BYU ScholarsArchive. For more information, please contact [scholarsarchive@byu.edu](mailto:scholarsarchive@byu.edu), [ellen\\_amatangelo@byu.edu](mailto:ellen_amatangelo@byu.edu).

## ARTICLES

### PRESERVATION OF EAST ASIAN LANGUAGE MATERIALS AT THE LIBRARY OF CONGRESS

Warren M. Tsuneishi

Library of Congress

Preservation at the Library of Congress is a cooperative venture involving virtually all of the major departments. Thus, overall policy guidelines are formulated by the Preservation Policy Committee chaired by the Director of the Collections Development Office, which is administratively located in the Office of the Librarian of Congress. The Preservation Office itself, located in the Research Services department, coordinates preservation activities, and also is responsible for research, development, phased preservation, and restoration. Involved in the preparation of materials for binding and microforming are custodial units in Research Services, the Law Library, and the Copyright Office. The actual work of microfilming is done in the Photoduplication Service the Chief of which reports to the Office of Associate Librarian for Management. Finally, bibliographic controls are provided by various units, in particular the Catalog Publication Division of the Processing Services department.

In this brief report on preservation activities relating to East Asian language materials, I will confine my remarks primarily to the work of the Asian Division of the Research Services department. It is here, in the Chinese and Korean Section and in the Japanese Section, that custody of East Asian language books and serials resides; and it is here that the major preservation efforts of the last 40 years have originated. It should be noted, therefore, that I will not be mentioning other substantial preservation efforts involving materials on Asia--including the work of such specialized divisions as the Far Eastern Law Division of the Law Library, and the Motion Picture, Broadcasting and Recorded Sound Division, the Prints and Photographs Division, the Serial and Government Publications Division, the Music Division, and the Geography and Map Division.

Preservation encompasses a wide range of activities, including binding, rebinding, reprography, conservation and restoration, and research and development, and I will touch briefly on some of these and more extensively on others.

The preparation of periodical issues and softcover books for binding is of course the first step in past and current preservation efforts covering a substantial portion of printed materials received in the Library from Asia. Softcover books purchased from dealers in China, Hong Kong, and Taiwan are normally bound by our dealers prior to shipment; otherwise they are prepared for binding in the Library and sent to commercial binders. The one advantage of binding in Asia is the appearance of binder's titles on the spines. American binders, unable to handle East Asian characters, supply no binder's titles (except romanized titles for serial runs, as desired). One result is that spine titles must be added by hand for a significant number of Japanese softcover books received in the Library.

When we go beyond binding, we find that the bulk of preservation work in the Asian Division (and its predecessor the Orientalia Division) for the last four decades has been in the area of microfilming of deteriorating materials. This effort may be characterized, with some exceptions, as being primarily reactive rather than systematic. That is, the selection of materials to be accorded preservation microfilming treatment--in accordance with standard specifications<sup>1</sup> and involving the production of a master negative and service positive--has largely been determined by user demand, not by a systematic combing of the stacks to identify and process deteriorating books and serials.

The major exception has been newspapers. Here, we have been following a systematic program of reducing to preservation microfilm virtually all current receipts in Chinese and Korean. Currently, for example, we are filming 24 Chinese and 7 Korean language newspapers published in Asia and elsewhere on an annual basis, discarding the original inkprint copies after completion of the process. That process should involve work in the Asian Division covering collating, preparation of macroscopic targets providing titles in romanization, period covered, and missing issues in the Asian Division; filming in the Photoduplication Service according to archival standards to produce master negatives and service positives; and frame by frame checking of the film against the originals before discarding<sup>2</sup>. Finally, for bibliographic control purposes, reports are submitted to the irregularly updated Newspapers Currently Received in the Library of Congress compiled by the Serial and Government Publications Division; and to Newspapers in Microform compiled in the Catalog Publication Division. In addition, the Chinese and Korean Section maintains a card file of all microforms in its custody to provide direct access to shelved films. Other libraries of course are encouraged to engage in cooperative microfilming ventures with LC to insure file completeness, and such ventures are reported in the National Preservation Report (originally issued in 1973 as the Foreign Newspaper Report), compiled by the National Preservation Program Office, itself a unit of the Preservation Office of the Library of Congress.

Japanese language newspapers, on the other hand, are not filmed<sup>3</sup>. Currently the Japanese Section receives five national newspapers from Japan in monthly reduced size editions--Akahata, Mainichi, Nihon Keizai, Nikkan Kogyo, and Yomiuri--and the Asahi, both in the daily newsprint edition and in the microfilm edition. The reduced size editions, which come in soft covers, are printed on reasonably good paper, and after receipt are bound and shelved as permanent additions to the Library's collections.

As is evident from the Asahi Shimbun case, the Library of Congress where it is possible acquires commercially produced film as part of its preservation program, utilizing the inkprint edition for current and timely use, and the microfilm copy for permanent retention. This procedure is also followed for deteriorating monographs and serials where the Library has either a deteriorated copy of a book or a substantial run of the periodical in inkprint form which would, under normal circumstances, become the target of in-house preservation microfilming.

Modern newspapers on newsprint grade paper are obvious candidates for conversion to film for preservation purposes shortly after accessioning because of the speed with which newsprint undergoes self-destruction. Books and periodicals from Asia printed

in this century following the introduction of western paper manufacturing methods and western-manufactured bookpapers also have built-in self-destruct mechanisms, and although the speed of degradation is slower, experiments have suggested useful shelf lives of around 50 years for such ground pulp book papers. This process of deterioration is obvious to anyone consulting embrittled early 20th century books on our shelves.

For a variety of reasons relatively few Chinese and Korean language books of this century have been given preservation microfilm treatment as "brittle books". On the other hand, substantial collections of modern Japanese books, most of them in a deteriorated state, have been filmed for preservation purposes under two projects operated in cooperation with the National Diet Library of Japan. In the first, conducted during 1974-1978, some 1,025 imprints largely of the period 1923-1945 which had been banned by the Ministry of Interior were found to be in a deteriorating condition and were filmed. Under an agreement entered into with the National Diet Library, the volumes which had found their way to the Library of Congress during the Occupation of Japan, were filmed under archival conditions in the Photoduplication Service, with the costs of filming and production of master negatives and service positives borne by NDL. In return, NDL received the inkprint publications, many of which had been dismantled or guillotined preparatory to filming.

The second project, also involving LC-NDL cooperation, has led to the preservation microfilming of research studies and publications largely relating to China issued in Japanese by the South Manchuria Railway Company (SMR) controlled by Japan during the years 1907-1945. Over 10,500 items were issued by SMR<sup>4</sup>, and of these NDL required copies of 2,500 titles held by LC and not locatable in Japan. This undertaking, begun in 1979 is expected to be completed in 1983. Some 2,000 titles have already been filmed. To expedite the work, the NDL is contributing the time of a staff member who arrived in Washington in April 1981. Filming costs are being borne by NDL. Preservation negatives and service positives will be retained by the Library of Congress. Reports of individual titles microfilmed are listed in the National Register of Microform Masters.

The only comparable projects for Chinese materials resulted in the conversion into microfilm of some 36 periodicals published in China between 1920-1950 completed in 1962, and a second project conducted in 1963-65 to film some 109 Chinese mainland periodicals<sup>5</sup>.

It is evident that we have made only a modest start in the massive effort required to preserve our collections: a few thousand volumes have been converted to film, compared to the 1,187,000 Chinese, Japanese and Korean volumes in our collections, which are being added to at the rate of about 20,000 volumes per year. We need to look at the problem in an entirely different fashion--a topic I will return to shortly.

A final category of preservation microfilms held by the Library of Congress needs to be mentioned at this point. These are materials that do not belong to the Library but which, under various circumstances, were filmed at the Library's initiative. Perhaps the most notable of these, and among the first to be done by the Library, was the collection of rare Chinese books belonging to the National Library of Peiping shipped to the Library of Congress for safekeeping in 1941.

Some 2,800 titles remained in the Library's custody until they were returned, to the National Central Library, Taipei, in 1965. In the period 1942-46, however, some 2,720 titles were microfilmed with the master negatives being retained by the Library of Congress. The project is described in James Soong's Chinese Materials on Microfilm Available from the Library of Congress <sup>6</sup>.

Similarly, World War II resulted in the preservation microfilming of Japanese archival sources from the Foreign, Army, Navy, and Home Ministries, as well as other government agencies, covering the years 1868-1945, for the Library of Congress. Master negatives for these archives are retained in the Photoduplication Service. These are described in two checklists compiled by Cecil H. Uyehara and John Young <sup>7</sup>.

Thus far we have dealt with past accomplishments, essentially in the area of preservation microfilming. What of the future?

Preservation of the Library's manifold collections has always been a concern, but it is perhaps only in the last two decades that librarians have come to fully appreciate the staggering nature of the preservation problem. As indicated earlier, most modern book papers are subject to self-destruction because of their acid content. Acidic book papers are the product of a process that revolutionized paper manufacturing in the mid-19th century, when the increasing demand for paper led to the use of ground wood pulp and alum-resin sizing for the production of paper suitable for high speed mechanical printing. The product and process were probably not used on a large scale for books in Asia until the turn of the century. It is for this reason that, ironically, the hand-made papers in our book collections from Ch'ing China, Tokugawa and early Meiji Japan, and Yi dynasty Korea are in better physical condition than most, Chinese, Japanese, and Korean language books printed since the early decades of this century.

The Library of Congress has attempted to address this problem as part of a national effort <sup>8</sup> focussing on research and development on methods to halt deterioration of acidic book papers and on developing other high technology means of reprographic preservation. The Library is also developing a systematic program of saving originals through phased preservation programs or through restoration.

Chemists working in the Preservation Research and Testing Office of the Preservation Office developed, and patented in 1976, a revolutionary approach to the problem of acid degradation of book papers. The nature of the problem and its cure--either through the deacidification of papers or through the original production of alkaline papers--have been known since the turn of the century. Various processes to deacidify papers have been developed and used, but they have generally been costly, especially if they involved single sheet treatment processes requiring, for example, the dismantling of a book. The new method is characterized as mass vapor-phase deacidification through the use of a special chemical, diethyl zinc (DEZ). Experiments conducted over the last five years by the Library--the latest, a test run of 5,000 volumes held at the Goddard Space Flight Center in Greenbelt, Maryland--indicate the feasibility of the process both technically and economically. Essentially the process involves loading books into a vacuum chamber, evacuating air from the chamber and moisture from the books--diethyl zinc reacts quickly with oxygen and water--charging the chamber with diethyl zinc in its vapor phase, neutralizing the acidic component of the paper and creating a buffering agent (zinc carbonate) to resist

future acid buildups--and then restoring the moisture content of the paper after the deacidification process has been completed. It is hoped that costs may eventually be reduced to about \$3.00-\$5.00 a volume in 5,000 volume runs. The Library is planning the construction of a large scale facility to treat up to 25,000 volumes per run.

While the DEZ process seeks to preserve the book in its original format, the Library is also investigating reprographic methods going beyond traditional photographic techniques such as microfilming and microfiche. This involves optical disk technology--a new computerized system for high density storage<sup>9</sup>, management, and display on high resolution CRTs or reproduction through laser printers. Likely candidates for this process are both new periodicals in high demand and older books and periodicals too brittle to use that are now being microfilmed. The Library has contracted for appropriate equipment and programs to do a pilot plan study of this technology.

We may observe that both of these high technology solutions to the problem of preservation--the first the DEZ process most useful in prolonging the lives of newly published books for centuries instead of decades, the second, optical disks, which may be most useful in providing space-saving high density storage for embrittled publications--are forcing the Library to examine not only its preservation but its collection development program. Questions of acquisition policy, of determining which works to preserve in original format and which to convert to microform or optical disk storage, of copyright, of bibliographic controls, of public service of preserved materials, etc. are being raised, in the context of short, medium, and long term preservation goals, availability of funding and staff, and the development of new technologies.

The reexamination of our collections from the preservation point of view and the need to allocate scarce conservation resources have also resulted in the development of a more rational and systematic approach to traditional forms of preservation. This can be seen in the development of a new point system for the allocation of priorities in the Library. The points represents staff hours available for various kinds of preservation work--e.g. paper conservation, major and minor restoration, and rare book restoration. During the past fiscal year just concluded, for example, the Asian Division was assigned 250 points for restoration purposes--that is, Division access to paper conservation specialists in the Restoration Office of the Preservation Office. The Division chose to use the time of the two specialists to conduct a survey to identify preservation concerns in the rare book collections in Chinese and Japanese. Their recommendations, recently received, include such mundane suggestions as rehousing of miscellaneous items currently in acid paper envelopes in acid-free boxes; reshelfing of tall and large size cases to provide adequate support; arranging for dusting off and cleaning of shelves to prevent buildup of embedded dust; provision for the complete covering of books with open tail and head folding cases; encasement of books with no protective housing; selecting of a limited number of rarities for full restoration treatment; and installation of ultraviolet filters to reduce damage from fluorescent lights.

We will, as the Chinese expression has it, move forward on two legs, one traditional, one modern. We will continue to house our book collections in the best state of preservation possible, while continuing to develop the means to deal efficiently and economically with great masses of deteriorating materials.

1. See Specifications for the Microfilming of Books and Pamphlets in the Library of Congress, prepared by the Photoduplication Service, Library of Congress (Washington: 1973).
2. See Specifications for the Microfilming of Newspapers in the Library of Congress, prepared by the Photoduplication Service, Library of Congress (Washington: 1972).
3. Substantial retrospective files of Japanese newspapers which were filmed some years ago are listed in Newspapers in Microform, Foreign Countries, 1948-1972 (Washington: Catalog Publication Division, Library of Congress: 1972).
4. John Young's The Research Activities of the South Manchurian Railway Company, 1907-1945 (New York: East Asian Institute, Columbia University, 1966) lists 6,284 titles. On the other hand, 10,514 items are found in Kyu shokuminchi kankei kikan kankobutsu sogo mokuroku, Minami Manshu Tetsudo Kabushiki Kaisha hen (Union Catalogue of Publications by the Former Colonial Institutions, South Manchuria Railway Company), published in 1979 by the Ajia Keizai Kenkyujo (Institute of Developing Economies) in Tokyo.
5. These and related activities are described in some detail in James Chu-yul Soong's Chinese Materials on Microfilm Available from the Library of Congress (Washington: Center for Chinese Research Materials, Association of Research Libraries, 1971) See especially Part I, Chapter IV. Periodicals.
6. Soong, pp. 5-10.
7. Cecil H. Uyehara, Checklist of Archives in the Japanese Ministry of Foreign Affairs, Tokyo, Japan, 1868-1945. Microfilmed for the Library of Congress, 1949-1951. (Washington: Photoduplication Service, Library of Congress, 1954).

John Young, Checklist of Microfilm Reproductions of Selected Archives of the Japanese Army, Navy, and Other Government Agencies, 1868-1945. (Washington: Georgetown University Press, 1959).

8. A convenient source summarizing various aspects of the national problem is A National Preservation Program; Proceedings of the Planning Conference. (Washington: Preservation Office, Library of Congress, 1980). This comprises papers presented at a conference convened by the Preservation Office in 1976.

Updated information is found annually in the July-September issue of the journal Library Resources and Technical Services, in the section on "Preservation of Library Materials."

9. Documents are scanned and read into optical disk storage in digital form. As many as 95,000 pages, or approximately 315 books, can be stored on two sides of an optical disk.