

Archives for Tomorrow's Historians

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ARCHIVES and records are the stock in trade of several crafts, among them those of the professional administrator, the record manager, the archivist, and finally the historian and the genealogist. During the past 18 months I have had the privilege of working closely with State and local administrators and the staff of the California State Archives on matters of procedure and policy regarding archives and records. In so doing, I have become aware of the implications for historians of present and possible future archival and record practices.

In this paper I shall try to evaluate the significance for historians of recent developments. I shall also try to point out the contribution that historians should be making toward the solution of problems that these sister crafts share.

There are five main questions that I would have you consider:

1. Will the new science of record management prove a boon or a bane to future generations of historians?
2. What is the present role of microfilming in archival programs?
3. What new types of material will tomorrow's historians have at their command?
4. How will modern business machines affect the historian's craft? And what implications do they have for archives?
5. How can archives be protected against nuclear warfare?

THE NEW SCIENCE OF RECORD MANAGEMENT

World War II did much to develop the branch of administration now known as record management. Record management deals with documents from birth to death. It seeks first of all to exercise birth control by determining the types of documents that an organization really needs. It eliminates unessential reports. It combines others. It snatches reports out of the letter baskets of the merely curious and rushes them to those who need them. It substitutes form letters for individual letters within the limitations imposed by the subject and by good public relations. It works over the organization of the

¹ This paper was read at the meeting of the Pacific Coast Branch of the American Historical Association at the University of San Francisco on December 27, 1957. The author is an administrative analyst for the State of California.

files in which the documents come to rest. And finally it caps its work by setting retention periods for the documents, determining how soon they may be destroyed without fiscal loss or administrative confusion. In short, the record manager determines what is to be available for the archives.

The greatest single stimulus to the growth of record management as a profession was the huge volume of papers created during World War II. In the late 1930's microfilming was seen as the great solution to the problems of bulk and of the reproduction of archival materials. It did not take long, however, to show that the cost of microfilming World War II records would be fantastic. Hence, attention was given to eliminating all records for which no use could reasonably be foreseen.

Now at this point a much closer partnership needs to be worked out between record officers, archivists, and historians. Your record officer is a manager. He is concerned with procedures, work flow, efficiency; he is aware of fiscal, legal, and administrative problems; but he is seldom a student of the social sciences or a research worker. Unlike the archivist, he has not had to serve historians. Yet archivists and historians must depend on decisions that he is making daily.

The record manager is accustomed to serving the administrator rather than the historian. Archivists, because a substantial part of their service is to historians, have developed an appreciation of the needs of the historical profession. Yet because the preliminary screening is being done more and more by persons who lack historical contacts and interests, there is a real possibility that documents of historical significance will be lost. The need for bringing home to local record management associations the historical uses of documents is the first point with which I believe historians should concern themselves.

RECORD RETENTION PROGRAMS

Let us turn to the phase of record management of most concern to historians: record destruction programs. From the standpoint of the historical profession, is there any good in them? I believe that we shall find there is much.

First of all, the writers on the subject emphasize the fact that certain types of records must definitely be saved. These include charters, legal documents, official minutes of a governing body, financial reports, administrative manuals, personnel record cards, organization charts, engineering and technical reports, and samples

of many other classes of documents. Actually, one could write a pretty good history of an organization from such material.

One advantage in a program of judicious and methodical disposal is that the truly archival materials are likely to be treated with more respect than they were formerly. The last copy of an administrative manual won't be thrown into the wastebasket merely because it is 10 years out of date — too old to use, too new to be a curiosity. The valuable materials are likely to be kept in order and in suitably clean and dry surroundings. And less emphasis will be placed on proposals for wholesale microfilming as a universal solution of space problems. Although microfilming has advantages in making copies of documents available far and wide, most historians, I believe, prefer to use the original document.

The principal danger, I believe, that historians should seek to guard against is the likelihood that files of correspondence of responsible administrative and legal officers will be discarded on the ground that they are too miscellaneous to sort out. A minute book gives the substance of an action, but too often it does not disclose *why* a particular decision was reached. Current files should be so arranged that policy matters and items of real public concern are segregated and preserved. This, of course, is easier said than done.

I believe that record management will prove a boon to the historical profession in the long run because of its intelligent effort to preserve the really important records. We historians, however, have several responsibilities in relation to record programs. One is to encourage an interest in record management among officials of government agencies and private businesses. Another is to take positive action to develop in record officers an understanding of historical values in documents, for all too often these officers are concerned solely with possible legal or fiscal uses. Still another is to record the interpretations of participants by means of oral history. Vaughn Davis Bornet has published a basic article on the *how* of that subject in the *American Archivist*.²

MICROFILMING NO UNIVERSAL ANSWER

What has happened to the microfilming programs so blithely begun a few years ago? First of all, as I have mentioned, it became apparent that many existing records had no further administrative or historical value and that the value of many others would disappear in the course of time. As an example, a pay warrant made out

² "Oral History Can Be Worthwhile," in *American Archivist*, 18:241-253 (July 1955).

to Earl Warren as Governor of California and endorsed in his own hand may have at least some curiosity value in the future, but few if any of the 14 million warrants issued and paid by the State of California in the last 7 years will ever have any real historical value. There are other documents more worthy of permanent preservation. Yet a few short years ago these warrants were considered to be permanent records. Step by step, the mandatory retention period was reduced to 15, then to 10, and now to 5 years, and no evidence has been produced that the State has suffered loss thereby.

Having decided that relatively few classes of documents must be preserved for a long period, we next consider the relative cost of microfilming and storage in space designed for the purpose. As good an overall figure as any is that you can afford to store documents in a record center for 35 years for the cost of microfilming. For punchcards, the break-even point may be 10 years. Documents that are out of order, folded or dog-eared or torn, or encumbered with staples, pins, and paper clips may be stored for a hundred years for less than the cost of microfilming. And there is always a question of the adequacy of microfilm reproduction — especially where inks of varying colors and intensities have been used.

This does not mean that microfilming will be abandoned. It has its definite place, both in conserving space and in making reproductions for use outside an archives. Rather, we have learned to use microfilm with more managerial skill. Many historians will appreciate this fact, as they still favor the originals for convenience and legibility as well as for sentiment.

NEW ARCHIVAL MATERIALS

So far we have been talking about preserving the conventional materials of history. Among the less conventional materials that are now available are motion picture films; phonograph records; sound recordings, which in the field of government include court proceedings and legislative committee hearings and might well include the full debates of legislative bodies; punchcards; punched tapes; and magnetic tapes for calculating machines.

Each of these raises problems for the archivist. Older motion picture prints and some foreign prints that are not on safety film present a real hazard. Phonograph records warp if not properly stored. Wax sound recordings melt, wire recordings snarl, and Vinyl recordings warp. Probably paper tapes are the best, but both wire and paper recordings are too easily erased through carelessness. Punchcards and punched tapes are useless unless their interpre-

tation is printed on them or is preserved in some other form in such a way that there is no question as to their meaning. When it comes to magnetic computer tapes, I am a bit skeptical as to the length of time they will maintain their magnetic characteristics unaltered. Every objection to punchcards is also applicable to them. And there is the further difficulty that slight variations in humidity and temperature alter the length of the tape and throw the machines off.

The advantages of newsreels and phonograph records in capturing the flavor and exact detail of an occasion need not be dwelt on. I think we should be aware of the increasing use of sound recordings in government, where typed transcriptions are not necessarily made. We should encourage the use and preservation of sound recordings, for motivation and argument often appear in them that are omitted from the formal minutes of a meeting. One practical difficulty is in the indexing of recordings. Without an index one may have to listen to hours of debate, when with the printed record one can scan it and pick out the essentials in a relatively short time. But as the professional monitor who usually operates the transcribing machine now makes a record of the names of the speakers, it should not be much more difficult for him to index the tape at the same time, using the metering device provided on most machines.

UTILIZING PUNCHCARDS

Let us turn from the consideration of new archival materials to the way in which tomorrow's historians may be able to apply machines in handling the materials.

Punchcards and their equivalents in paper or magnetic tapes furnish our basic units of statistical data in a wide variety of operations.

I believe there is a wealth of material in punchcards held by our social agencies and financial and business institutions that could be rerun in historically significant patterns. Are customs figures on San Francisco's shipping not broken down fine enough for your purposes? Perhaps the original codings were set up so that you can have them rerun either by the agency or by a commercial service bureau.

From an archival standpoint, I believe punchcards present special difficulties. Because of their large volume in relation to the usable data that they afford, your cards may exist today and be sent to salvage tomorrow. Statisticians love to hang on to their old cards in the hope of reusing them to obtain more information, but the record officers are on their heels, nagging them to get rid of the junk.

The first step toward a general solution of the problem of pre-

serving statistical data in punchcard form lies with the historians. By seeking to exploit samples of the principal types of material to the utmost, they can furnish guidance to record managers and archivists in the preservation of punchcards. Once we determine what data are worth preserving, the next step may be to microfilm punchcards by methods already developed. I do not believe that tabulation direct from such microfilm has been announced yet, but I understand such a process is being developed.

MACHINE LITERATURE SEARCHING

Despite yeoman efforts to reduce bulk, the volume of archival records is growing with frightful speed. How can we use machines to gain control of the content of all this material?

Normal archival practice is to keep documents in groups by source and so far as practicable in the order determined by their creators. Beyond that, where funds are available, descriptions of the record groups are prepared, and in some instances name indexes are made. So far as I am aware, nothing has been done in the field of archives or of historical materials generally that parallels the machine literature searching of the natural sciences.³

One of the pioneer efforts in the field of machine literature searching was the American Chemical Society's bibliographical project. The basic step in any such project is to develop an adequate classification scheme. Next, one fits a numerical or alphabetical code to it. Each document or group of related documents is then analyzed and coded into the classes where it fits. A card is punched for each. If desired, a microfilm of the document, article, or abstract is attached to the card. A student who wishes to investigate a topic specifies the combination of classes he is interested in. The desired cards, already sorted by primary classification, are fed through a machine at the rate of as many as 1,000 a minute. The few that fit the student's specifications are thus sorted out, and ordinarily they will be fed through another machine, which produces a listing automatically.

If archivists and historians are to take advantage of these machines, the first step is to develop a classification system that is sufficiently broad in scope, fine-grained in detail, and adequate in cross-indexing. It was a shock to me to discover how much of the work done in developing classification schemes pertained to science and technology and how little to our own field. I realize that there are differences between the application of machine searching to

³ See James W. Perry and others, *Machine Literature Searching* (New York and London, Interscience Publishers, 1956).

archival materials and its application to scientific publications. I doubt, however, if one is vastly more complicated than the other. May I refer those interested in the problem to the book cited in footnote 3.

Let us develop an example of the application of machine searching to archives. Having evolved our classification scheme, we seek to get it adopted by as many archivists, manuscript librarians, county recorders, and county clerks as we can. Once the scheme has been adopted, a card is punched for each class or subclass into which a record group falls. In some cases indexes will be made as well. Each custodian keeps his own cards and supplies copies to a nationwide union file.

If I now decide that I want to make a nationwide study of farm mortgages in the 1880's, I write the union file and state that I want a listing of archival resources on that topic. By consulting the classification scheme, I define the desired documents as those found under Real Property, subclass Farms, that are also found in the class Mortgages. When the cards are run off and the listings made, I shall know each county in the United States where such records are available for the period with which I am concerned. I may also find that a few secretaries of state have such records and that additional information is in various historical societies. I trust I shall also find listed each master's thesis and doctoral dissertation that has been done on the subject.

Historians, of course, are not likely to have the funds to produce such a monumental effort as the machine indexing of the principal archives of the United States. By taking the long view, however, they may be able to guide administrative practices in the direction of overall uniformity and efficiency from the standpoint of research use.

I have already pointed out that the initial problem is to build a satisfactory classification scheme. In such a project historians will act as consultants to the archival and library fraternities. The next task in which they may be expected to share is in persuading State and local officials to accept such a program. Finally, it will be desirable to adopt a relatively standard means of copying, whether by microfilm, microprint, or otherwise.

Let us use our imaginations and go a step further. Conceivably we could take components available today and put documents on magnetic tape just as easily as Bing Crosby tapes his TV shows. With a code running down the edge of the tape, conceivably millions of documents arranged at random could be searched in a phenome-

nally short time by such a machine as the IBM 702, and microcopies of the documents could be made at the same time. There are, of course, practical drawbacks to this utopian proposal. One is the cost of the machine; another is the vast amount of preparatory labor that would have to go into coding and copying the documents; a third is the large number of reference questions that would have to be fed into the machine to make it profitable.

I regret to report that I see little hope that machines will relieve tomorrow's historians of the need for reading documents, making notes, or thinking, let alone writing or lecturing. Machines will enable them to handle large masses of data with speed and accuracy; machines may even help review logical choices; but they won't replace historians in the immediate future.

SECURITY OF ARCHIVES FROM DESTRUCTION

The final topic I want to mention is the need for action to preserve our most valuable archives from nuclear warfare. To protect them for tomorrow's historians, we must move them out of our major cities and put them underground. While European governments are acutely aware of the possible destruction of their archives, Americans on the whole have disregarded the threat both to themselves and to their records.

California's secretary of state has put microcopies of much of his archival material in a blast-proof vault. Los Angeles County has microfilmed many of its land title records and county clerk's records, but the vault in which they are stored has been outdated by the hydrogen bomb. San Francisco County microfilmed many of its records during World War II but has done little since. The location of its vault, in downtown San Francisco, is far from satisfactory.

CONCLUSIONS

Is the historical profession going to stand aside without counseling other groups that are making decisions so vital to its own future? It should not, and I believe its assistance will usually be welcomed.

Record managers are concerned to know which records are genuinely important. They will shun mere antiquarianism but will welcome the man who can point out the records that have historical as well as administrative value.

The collection of the less familiar archival materials may have to depend chiefly on the initiative of historians and college librarians. I believe archivists and record managers are willing enough to accept this material, but the fact that such records do not often end

in a central file room tends to keep them outside the purview of the record manager or archivist.

Improvement of statistics for historical use, like guidance to record managers and the collection of unconventional materials, can be achieved only if the historian gets out into his local community — into his city and county offices, into the headquarters of business organizations — and, by actively interpreting the historic roles of those organizations in American life, cultivates understanding of the historical importance of their documents.

One quite immediate benefit should come from this. To match the vast influx of students into our colleges and eventually into our graduate schools, we shall have an abundance of original materials for masters' theses and be able to avoid undue reliance on printed materials and secondary works.

Once again I want to point out the basic work that must be done on classification schemes if we are to move on to the new levels of exhaustiveness and efficiency promised by the methods of machine literature searching.

Finally, we who are historians should ascertain immediately what steps are being taken on all levels of government to protect our historical documents from the newly increased danger of destruction. We cannot expect to give them one-hundred-percent security, but we can do much to give them better protection than most archives now have. Although money is needed, intelligent planning comes first.

Indeed, the whole theme of this paper could be summed up thus: If our successors are to have the materials for truthful history, we must plan *now*.