

# The Physical Preservation of Anthropological Records

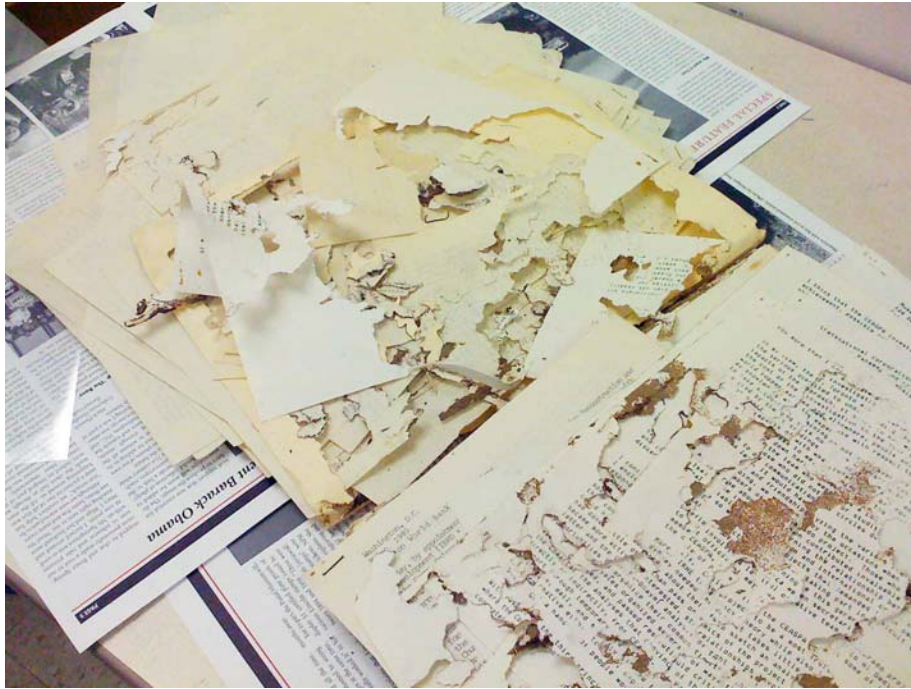
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Anthropological records are not all that different from records generated by other scholars, nor from those created by politicians or bankers. Physically, most records are still paper, but they can also be photographs, sound recordings, and, for more recent collections, computer tapes and disks. A basic conceptual distinction made by archivists is between records still in use and those no longer needed to conduct daily work. Most individuals will also recognize a distinction among their own records consisting of research materials, professional files (such as administrative and teaching records), and personal papers.

Archivists considering the records of organizations seek items that document policies and decisions and their interpretation, or that give information on specific subjects. In the case of individuals' records, the materials of particular interest would be correspondence files, items generated by original research, unpublished reports or typescripts, photographs, maps and charts, and data bases. Because archivists are often familiar with the discipline or profession they deal with, as well as having training in historical trends and methodology, they can evaluate records for their potential long-term significance. Nineteenth-century life insurance ledgers, for example, have provided important demographic and financial information for historians. Current life insurance tables, however, are so extensive and contain so much less personal information that only samples of this material are being retained.

Certain characteristics of anthropological records are probably unique. Anthropology seems to have a higher percentage of vital unpublished information than most other scientific disciplines because of fieldwork methodologies. Perhaps more than in any other discipline, fieldwork documentation is important for recording what the scholar observed and experienced, which is always potentially relevant to subsequent interpretation. Anthropological research generates material that can never be duplicated. Excavations disturb remains that have lain intact for centuries, while a living society's contact with an anthropologist may have a significant effect on it. Once fieldwork is completed, only photographs and written or taped documentation remain to reconstruct the subject of research as it was originally encountered. Subsequent

fieldwork cannot entirely replicate the subject because it will deal with a different point in time or will be done by a different person who will elicit different responses from informants.



Insects have devoured this collection of recent fieldnotes from Panama. Photo by Robert Leopold 2009.

Publications usually cover only a small portion of the field documentation. An example is in the use of photography as systematic documentation; the images captured have site or ethnological information that is not recorded elsewhere. The photographs are a primary record, and only a fraction of them will be used for publication. Moreover, the methodology for research is aimed at the impartial gathering of information, while publications present the viewpoint and interpretations of the author.

The creator of records cannot predict all the possible applications for his/her documented observations. Scholars today are looking at earlier archaeologists' correspondence for ethnographic information or for additional site documentation. Incidental information becomes vital. For instance, in 1929 an anthropologist sketched the floor plan of a St. Lawrence Island house; recently, a sociologist discovered that it was the house in which her informant spent her childhood, and the sketch proved to be a tangible means of evaluating the accuracy of the informant's memory.

### **Physical Preservation**

The anthropological record represents a major challenge for archivists. Some collections of anthropological records can be formidable because

of the space they require. This is particularly true of the records of modern archaeology. Archaeology generates an enormous quantity of maps, plans, provenience records, and a plethora of other kinds of documentation, as well as extensive photographic collections. Moreover, archaeological fieldwork is generally a team effort whose multiple records should be housed in the same repository. From the archival point of view, the amount of storage space and equipment needed to properly house the materials is almost overwhelming. In addition, if records are poorly kept, they may require expensive conservation. Computer records also come at a price, since they have to be reformatted as hardware changes.

Although good rag paper and silver-based film can last five hundred years or more under proper storage conditions, all too often the conditions are poor and the materials are not durable. Ephemeral supplies may be chosen for expediency and price. The yellow carbons of the 1930s are already disintegrating when touched, and the thermofax copies of the 1950s have often faded into illegibility; contemporary fax copies will disappear in a matter of months. In the field, the anthropologist uses whatever materials are available. In one case, this meant some lovely petroglyph tracings from Alaska were done on toilet paper. Some field techniques, such as recording with wax cylinders, combine problems of the medium — the wax cylinder becoming brittle — with problems of the availability of the proper equipment on which to use it.

The use of computers will not add to the longevity of the record. Diskettes are commonly given a three-year life span, even less for the cheaper brands. Manufacturers of compact disks now admit that they do not have the lifespan of books and papers, while tape experts are advocating two backups for any archival applications (Saltzer 1991). The paper by Kemper in this volume discusses computer records in more detail.

It is easy for a modern academic to see the difficulty of dealing with wax cylinders, key punch cards or poor storage, but it is not as easy to look at present-day materials and imagine their future vulnerability. Several years ago, a group of archivists and graduate students, aided by an advisory committee that included representatives from the American Anthropological Association, the Archaeological Institute of America, the Society for American Archeology, and the Society for Historical Archaeology, wrote a manual on preservation techniques (Kenworthy et al. 1985), because it was clear that modern anthropologists were thoughtlessly creating records on short-lived or unstable media. Funding was provided by the National Historical Publications and Records Commission of the National Archives, in the expectation that sound practices in the field and office would ease the burden on archivists' slim budgets. The manual's purpose was to try to prevent future problems by signaling what is already pernicious in an office or a field setting.

The most important element for preservation is a consciousness that one should be creating records that can be used by others — or even by oneself in future years — and then planning to facilitate this use.

Documents that are unique and have the greatest potential value should be created with good materials: rag paper, high-quality tape, stable inks or pencil. These supplies are usually not much more expensive than inferior materials, but they should be included in a project budget, as should future preservation activities like preservation photocopying, microfilming or other reformatting, and storage. Labeling all field notebooks, drawings and other records, and documenting how records are created — particularly electronic records — seem elementary, but they are often not done systematically.



Volunteers Eloise Vitiello (left) and Caroline Kenney examining broken glass plate negatives in the National Anthropological Archives. These have now been safely rehouse in customized sink mats.

Each medium has certain qualities that need to be considered in terms of the goal of long-term preservation. Ordinary paper contains lignins from the wood pulp used in its manufacture, as well as other chemicals; the acids not only break down the paper fibers over time, but they also migrate from one piece of paper to another. Thus, an old newspaper clipping stored in a book eventually embrittles and discolors what may otherwise have been long-lived adjacent pages. Archivists rehouse acidic papers in acid-free papers and boxes, both to provide a better environment and to ensure that deterioration from acid migration is minimized. Since anthropologists often keep records for long-term office storage, starting with acid-free materials would eliminate the need to

rehouse archival files. If important documents have been created on inferior paper, the information can be preserved easily by photocopying onto acid-free paper. With a minimum of information about what to look for, anthropologists can buy good quality materials from archival catalogs and local stores, usually for similar prices.

Paper is affected by the materials used on it or around it, such as pens, paper clips, glue and tape. Some inks are so acidic as to eat through paper, while others bleed or transfer through paper. Paper clips can rust, as well as break paper by bending it unevenly. Pressure-sensitive tape and rubber cement should be avoided because both discolor, dry out, and leave a permanent residue. The new yellow "post-its" seem easy to remove, but their sticky residue attracts dirt and eventually creates a discoloration similar to tape. Rubber bands contain sulfur, which causes stains on paper, and they become soft with age, making pages stick together.

A copying program for critical or fragile records — onto microfilm, slides, or photocopy — will safeguard them and help reduce damage from handling. Encapsulation, or inserting the papers into an inert plastic like mylar, provides excellent protection. It is particularly useful for maps and photographs, preventing the transfer of dirt and oil from fingers as well as providing support to prevent tears and curling.

Audiovisual materials are generally more perishable than paper; initial care is much less expensive than counteracting deterioration. Photographic prints are paper treated with chemicals, while photographic film is layers of emulsion and base processed with chemicals. Chemical residues left over from processing film and prints create the most obvious problems, so it is important to process film in a reputable laboratory that tests its equipment. The most common test is done with methylene blue to measure residual sulfide. Most photographic papers are stable if they have been well processed, although resin-coated (RC) paper still does not meet requirements for archival purposes (Ritzenthaler 1994:38). Modern negative bases have improved since the highly undesirable cellulose nitrate and cellulose diacetate manufactured between 1910 and 1960, but cellulose triacetate (the most common film base used today) does not seem to keep as well over time as was expected, and polyester film is now used for preservation microfilming and archival copying projects.

Color film is made with organic dyes that decompose fairly rapidly, so that it is much less stable than black-and-white film. The best precaution for color film is to make a duplicate set of images, preferably in black-and-white. With color slides, it is advisable to make multiple sets, one of which is stored well (in a cool dark place) and not used.

Tape recordings will be better maintained if they are made on good quality cassettes with screws that allow them to be dismantled for repair. Tapes must be stored vertically and protected from dust. Motion picture film, on the other hand, is stacked horizontally to prevent warping. Multiple copies will prevent loss of information; videocassette copies can be used for reference purposes.

Electronic technology, as noted above, is not a preservation medium (see Mohlhenrich 1993). Paper printouts, even those on low-grade computer paper, are still considered more stable than tape or optical disk. On the other hand, it is always simpler and less expensive to store a record in the format in which it was created. It is crucial, however, to make backup copies of computer files, properly stored (in a cool location with stable humidity) separately from the originals. Because of rapid changes in hardware, it is also important to copy computer files regularly, converting to the latest technology available.

All materials react to poor storage. Maps and drawings stored folded or rolled rather than flat will crack more readily when used. If they fit into boxes, map drawers, or blueprint cabinets, they should be stored flat in acid-free folders sized to fit the box or drawer. Very large items can be rolled around a large acid-free core, covered by an outside layer of acid-free paper or inert polyester. It is useful to have a photograph or microfilm of the item for reference, to avoid the damage of repeated unrolling. Obviously, records should not be stored in humid basements where they will get water-damaged or moldy, or in attics where they can get eaten by mice or soiled by pigeons. Conservators now agree that it is more important to have a constant temperature and humidity than to strive for specific heat and humidity levels. Environmental cycling produces expansion and contraction, weakening paper fibers and affecting emulsion on film and tape. Good air quality is important because pollutants, such as sulphur and nitrogen, and dust affect records. For film, particularly color film, colder temperatures reduce chemical reactions, and some archives use frost-free refrigerators or special cold rooms for film storage.

### **Preservation in a Repository**

Even if office or laboratory conditions are ideal, eventually records should be transferred to an archives or other long-term storage facility. Surprisingly, many anthropologists still need to be convinced that their records are worth keeping. Archivists deal with unpublished and therefore unique materials, but many anthropologists assume that everything of importance is described in their publications and that no one would be interested in the original materials. Scholars often are too modest about the significance these records might have for the future, and they may worry about faults a new generation might find. Few researchers, however, use records for purposes of muckraking; those reanalyzing early WPA archaeology records, for example, are interested in the data contained for repatriation, land-use and other ongoing purposes, not weaknesses in methodology. Records created in the past enable us to see changes in anthropology, and they document cultures or sites that have been altered or have disappeared. It is almost paradoxical that practitioners of a discipline focused on capturing how and why other people function as they do may assume that no one would be interested in their own methodology or the development of their thinking.

There are other reasons that anthropologists' papers are not in archives. Anthropological fieldwork contains personal observations and

interpretations that the creator may still want to use for publication or other purposes. Often publication takes a long time, and a publication will likely deal with only parts of the fieldwork. The anthropologist may put the unused records on an office shelf, assuming that there will be time to go back and work on them. Frequently the publication is not completed in the institution that sponsored the initial fieldwork. Then the papers may be packed up and taken to the next institution. It is difficult to know where a set of papers should be deposited when the researcher has changed affiliation or participated in a joint project.

The confusion is compounded when the papers are no longer with the creator. A promising graduate student may be entrusted with a portion of the field notes to be used for a dissertation or a related publication. If a contract or other agreement has not been made to return papers to an institution, the student may regard them as a gift. Another familiar scenario is that the anthropologist takes a set of field notes home intending to work on it. At his/her death, the family assumes that the papers are unimportant, since they sat in a corner for twenty years. They treat them as family curiosities or discard them.

Archivists routinely distinguish between office files, scientific fieldwork, and personal papers. The distinction is made not because one group is more important than another, but rather because the legal considerations are different. Archivists are usually affiliated with an organization such as a university or a museum, and office files are the property of that institution. Personal papers concerning family, hobbies, club affiliations and similar subjects are owned by the individual and can be contributed to an institution; the donor can receive a tax benefit or might even be paid for them. Unfortunately, since archives generally lack acquisition funds, personal papers with market value are sometimes sold to private collectors. The loss to the profession in this case is very great, because access to the materials will be limited.

Records of fieldwork sponsored by an institution are generally considered the property of that institution. This policy, for example, was officially recognized by the curators at The University Museum (University of Pennsylvania) when they were establishing an archives. On the other hand, the papers of a researcher are also protected by laws and societal beliefs concerning academic freedom and the ownership of ideas. University lawyers are reluctant to establish precedents. In one case, a graduate student's widow gave his papers to an institution unaffiliated with the fieldwork; although the sponsoring university was publishing reports on the site, it was unable to obtain the field notes and maps it needed from the other institution.

Anthropologists, their institutions, and their families need to understand that records produced during a career have enough significance to merit their preservation in a permanent repository. There is much work to be done to persuade anthropologists that researchers and others will benefit from access to original field notes or from being able to establish context through correspondence files. More effort will be needed to encourage institutions to develop policies concerning the retention of archival materials, as well as to commit time and space to this purpose.

## **Recommendations**

The most important way of ensuring the survival of records for the future is to plan for their preservation before they are produced and to ensure their care while they are still in the hands of the anthropologist.

- Determine which documents are unique and have the greatest future value, as early as possible in the course of a project.
- Plan and budget for suitable supplies for critical documents and for preservation activities.
- Label all field notebooks, drawings and other records, and document how records are created, particularly electronic records.
- Use acid-free paper for field records and acid-free folders and boxes for important files.
- Copy important documents onto acid-free paper using a heat-fusion photocopy process or onto microfilm.
- Avoid pressure-sensitive tape, "post-its", rubber cement, rubber bands, and metal paper clips.
- Process film in a reputable laboratory that tests its equipment for destabilizing chemicals.
- Make a duplicate set of photographs, preferably in black-and-white.
- Store a backup copy of each important computer file in a location different from that of the original.
- Copy computer files regularly, converting to the latest technology available.
- Store materials at a constant temperature and humidity, and protect them from light, water, pollutants, and other hazards.
- Arrange for timely transfer of records to an archives or other long-term storage facility.