

Transcript of Care & Handling of Rare Books, Paper, Manuscripts, Photographs & Archives (19.16), 2013

Narrated by David Ashman, former Preservation Manager and Book Conservator, Auckland Libraries

<https://www.youtube.com/watch?v=28w5mHpLiOI>

## **Care & Handling of Rare Books, Paper, Manuscripts, Photographs & Archives**

[Image of a bound book with a red cover and gold title on the front “Care of Heritage Collections”; the book opens and the sound of paper turning is heard]

Narration begins.

David Ashman: Hi, my name is David Ashman, and I’m the preservation manager and book conservator here at Auckland Libraries. Myself and my team are responsible for the care of the heritage collections that are held at Auckland Libraries. Libraries and archives are responsible for looking after heritage collections, so they can be passed on for the benefit and pleasure of future generations. These collections can include manuscripts, photographs, maps, ephemera and books, many of which are rare, unique, and irreplaceable.

Unfortunately, due to the organic and mechanical nature of our library materials, they are highly susceptible to damage and degradation. However, with a little care and some simple techniques, we can slow down the rate of deterioration so that these valuable resources will last for hundreds of years to come.

Books and archives are composite items made up of a range of materials that may include leather, paper, cloth, wood, gelatin and metal. They are all materials that will break down naturally in time. The environment they are stored in and the way they are used can accelerate this. In this presentation, I will cover some of the

problems that can be encountered and the kinds of things that might be done to overcome them.

Conservation falls into two broad different areas: preventive and interventionist conservation. Preventive includes things like environmental controls, temperature, humidity, light, education of uses including care and handling, storage such as boxing and shelving; pest management and disaster preparedness plans, and protective enclosures. Interventionist conservation is the reason many conservators are attracted to the profession. It includes the treatment and stabilization of damaged books, paper, and archives. Let's begin by looking at some of the causes of deterioration, and the preventive measures that can contribute to the longevity of our heritage collections.

Any kind of light will affect books and archives, though ultraviolet light from the sun and fluorescent lighting are the most severe. Light will cause the fading and weakening of cloth and leather and discoloration, yellowing, and embrittlement of paper. Heritage and archival collections are best stored out of the light. This can be achieved in storage areas by turning off unneeded lights, closing blinds or curtains, and filtering windows with special films. Shelving can be positioned, so it doesn't face windows with light streaming through. Having material stored in conservation-grade boxes will also protect from the effects of light.

As in any chemical reaction, an increase in heat will speed up the deterioration process. Books, paper and photographic materials will benefit from being stored in cool conditions and away from heaters or areas that warm up in the sun. Warm, damp conditions are particularly prone to mold growth. Mold spores are always present in the atmosphere and only need the right conditions to bloom. Relative humidity should be stable at around 50 to 55%. When above 70% there is

risk of mold growing that can spread fast and cause irreparable damage. Pay particular attention to hidden or out of the way spaces where the air is static, creating microclimates ideal for localized mold colonies. Shelving is the best positioned away from walls that are adjacent to damp areas such as a kitchen or a washroom. The use of dehumidifiers and fans can be a temporary solution for improving air circulation and reducing relative humidity. On discovery of an outbreak of mold, confine the affected material by wrapping and then isolating away from the collections before contacting a conservator.

Damp conditions are also more hospitable to the kinds of insects that will devour the starches and glues in books, paper, and photographs. Food and drink around the heritage collections can cause a mess and attract vermin such as mice and insects. Mice and rats will shred pages for nesting. Silverfish can deface and literally eat the words off the page of a book, and borers will tunnel their way through the fattest of volumes. Keep an eye out for signs of pest activity so that appropriate action can be taken to get rid of them. It is better to make the storage areas impenetrable or conditions inhospitable for the insects than to treat with chemicals that can be damaging to books as well as human health. To reduce the risk of pests effecting the heritage collections, ensure that drink and food is consumed only in designated areas that are kept clean and tidy. Food scraps and wrappers should not be placed in bins close to collections and bins should be emptied at the end of each day.

Dirt and dust is an abrasive that can have the effect of sandpaper when rubbing up against books and archives. It will also attract moisture causing localized mold grow and act as catalyst for harmful chemical activity. When maintenance work is carried out that may create dust around collections, make sure that appropriate precautions are taken to mitigate the risk. Over time dust will build

up even in the most controlled of environments. Loose dust can be removed by cleaning with a soft brush: hold the book tightly shut and brush away from the spine to avoid forcing the dirt and dust into the pages. It is preferable to use a vacuum cleaner specially designed or adapted for this kind of treatment. Speak to a conservator about this if you are looking at a large-scale cleaning project for a heritage collection.

Handling books and archives is another potential source of damage that can be minimized. Ensuring hands are washed and dried beforehand will prevent dirt, oils, and perspiration being transferred to surfaces. Avoid the use of hand or barrier creams when using original collection materials as these can easily mark and damage porous materials such as paper and leather. Wearing white cotton gloves will lessen the possibility of leaving fingerprints and soiling vulnerable material. However, the gloves require regular changing and should be laundered using a chlorine- and additive-free detergent. Double rinsing is also advisable. The downside of wearing gloves is it may reduce manual dexterity. In particular this can be an issue when looking at very fragile material. In these circumstances, it is best not to wear gloves and ensure hands are clean and dry. A simple solution to this could be my fingerless glove method. A destructive technique that allows a level of sensitivity whilst keeping the hands covered, and remember that changing gloves and regular hand washing will still be necessary.

If you need to take notes whilst in close proximity to original material, using a soft pencil such as a 2B is preferable, as this can be easily removed in the event of accidental marking. Never use pens or markers around heritage materials. Paper fingers are simple and easy to create that allows careful turning of pages without direct contact. Be aware of buttons, pendants or lanyards and jewelry such as rings and brooches that can damage fragile and soft materials.

Book shelved badly put a strain on the bindings. As you can see in these pictures, books leaning on their sides become misshapen and the joints and sewing will be strained, causing weakening and splits. Heavy bindings stored on their fore-edge or upright on the tail will cause the structure to collapse and weaken the sewing. For standard-sized books, shelve upright with a matching-sized book end to support them from sliding to an angle. They are best supported if firmly held against adjacent books. Make sure there is space behind the books and the shelves for air to circulate. In addition, keep an eye out for signs of mold, insects, and vermin. Very large or heavy books are best stored horizontally; if shelved upright, extra strain is exerted on the spine, resulting in damage to the sewing structure and joints. Set the bottom shelf position at least 150mm above the floor to reduce the risk of damage when cleaning floors and in the event of a flood.

See how this book is being removed from the shelf. The head cap is being ripped off and serious damage can be inflicted by trying to prise it out by grasping along the edge of the spine. To avoid this kind of damage, I recommend following these methods for removing books from shelves. If there is enough room, reach over the top and pull the binding forward with your finger on the fore edge. Then, get a firm grip on the sides of the boards along the spine edge and remove carefully. Remember to readjust the remaining books so they are not leaning at an angle. If there isn't enough room to reach over the top, you can push the books either side of the one that needs to be removed and get a firm grip on the sides of the boards along the spine edge. And again, remember to readjust the books so they are not leaning at an angle. Alternatively, you can use a dummy book to replace the one that has been removed. Large and oversized items may require two people to handle them for the safety of the item and the handlers. Always carry large volumes by supporting the spine and use a trolley for transporting. Maps and

plans can be unwieldy items to handle. Always support them on a rigid support. And use a trolley to transport around the building. Special trolleys such as this one can be useful for transporting very large and oversized maps.

Having a clean and prepared space is good practice for receiving material when taken from the shelves. An untidy working area may harbor hidden hazards, such as open pens and objects that can cause damage. Keep books piled no more than three high to avoid the risk of them tumbling over, and ensure that larger books are not piled on top of smaller ones, and that books with bosses or metal work on them are not top of each other. For large oversized maps and documents, soft weights can be used to hold open. Don't force unrolled if very tight and brittle. Refer to a conservator for advice on flattening.

Photocopying tight bindings or precious books on a flatbed copier or scanner will strain the spine and cause the joints to split. Always seek the advice of a conservator or other experienced staff member before copying or scanning any heritage library materials. One option for tightly bound books is to photograph the required pages with the book supported at a comfortable angle and then print it out. This procedure needs to be undertaken with care as the safety of the material being photographed is paramount.

Book supports are also a way of ensuring that tightly bound books and albums do not suffer undue strain when used by researchers or readers. It can be adjusted to support the book at the angle of opening most suitable for a particular binding. They are especially useful if used for old vulnerable books, and it demonstrates another level of care that will encourage others.

Always refer uncut pages to a conservator or someone with the right equipment and skills to perform a clean and regular incision. All too often, pages

are separated with an inadequate understanding that results in torn and dragged edges. I have seen dog ears, bus tickets, spectacles, and pencils all used as bookmarks. A strip of newspaper left in a book can result in burn marks on the page due to the acidic nature of newsprint. Inserting thick book marks into the gutter will create a strain and cause joints to split and the spine to break. Post-it notes are particularly insidious as they can leave behind an invisible residue of adhesive that will attract dirt and dust and may cause pages to stick together. To mark a place, always use a strip of acid free paper or tissue. That way, if it is left behind even for few hundred years, it won't result in damage to the material it is in contact with.

Containing a book inside a protective enclosure can be an appropriate alternative to repair. It will protect against further damage, protect from light, it ensures safe handling. It affords some protection from fluctuations in relative humidity and temperature, and it does give some minimal protection against fire and flood. Home repairs using glues such as PVA and pressure sensitive tapes, including cellotape and magic tape, are harmful due to acidity and irreversibility. I see a lot of material that has been repaired in this way that makes conservation more complicated, as the original repairs must be removed before treatment can begin. Magnetic or self-adhesive albums popular in the 1970s and beyond can cause permanent damage to the photographs contained within. It is best not use them at all and, if possible, remove photographs that are held in these kinds of albums. If they are too firmly stuck to easily remove, discuss options with a conservator. Photographs can be stored in archival quality albums made from materials that have passed the photoactivity test. Check with specialist conservation suppliers or a conservator.

Increasingly, modern materials are finding their way into our heritage collections. Optical disks, such as DVDs and CDs should be handled by the outer edge. Do not touch the surface of the disc. Flexing and bending discs can cause them to crack or delaminate. Do not write or mark in the data area of the disc, this is the area that the laser reads. Write on the clear hub area of the disc or, preferably, on the packaging that contains the disc. If an optical disk become dusty, dirty or fingerprinted, it may be possible to clean it before permanent damage occurs. Take great care, gently remove loose dust using a non-abrasive photographic lens tissue or very soft brush. Modern digital images when printed out should be treated in the same way as other paper-based materials. When properly stored, dye-based inkjet and dye-diffusion prints have stability comparable to that of traditional photographic prints.

Restoration and rebinding may get a book back into working condition. However, if non-archival materials such as PVA glues and acidic spine linings have been used, this will contribute to its deterioration rather than long-term preservation. The integrity of a book is affected if endpapers are replaced or pages trimmed and if a book is rebound rather than the original conserved. This can result in the loss of important artifactual or historical detail. For more information, see the New Zealand Conservators of Cultural Materials Code of Ethics at this web site.

Web site from the video: [www.nzccm.or.nz](http://www.nzccm.or.nz)

David Ashman: An essential path of preventive conservation is having a disaster preparedness plan. To be effective, the plan should be kept simple. A disaster is a stressful event and having a complicated plan will only add to the stress. A disaster



plan should include: A simple action tree with a single point of contact; trained teams and their contact details; first response materials, equipment and supplies. All staff within the organization needs to know what their role is and how to respond. A detailed written manual, which contains logistical information such as priorities and contact details, relationships with suppliers and professionals, staff publicity and awareness raising among all staff, and ongoing training and evaluation. It is crucial that whoever discovers a disaster recognizes it as such and knows how to respond. Having well-meaning staff undertake salvage without proper training can result in unnecessary damage. It is important that everyone knows what his or her role is and who to contact. Whoever discovers the disaster first can take immediate action to prevent further damage. For instance, covering shelving with plastic sheets, turning off water at the mains or extinguishing a small fire. It is important that lines of responsibility be clearly drawn well in advance. Those normally in charge may be required to accept directions from disaster readiness team leaders or the disaster readiness coordinator. A disaster preparedness plan can be seen as an insurance policy against unnecessary loss. The associated costs are like paying premiums: not popular when things are humming along nicely; however, in the unhappy event of a disaster, the planning will pay dividends well in excess of any payments made.

If we were to lock our collections away in a climate-controlled vault, never to see the light of day, just think how much longer they would last. However, books and archives are meaningless objects unless they are browsed, read, and handled. Therefore, by treating them gently ourselves and being seen to handle them with care by our valued readers and researchers, we can encourage a culture of good care and handling that will contribute to our rich and diverse collection of documentary heritage being available for future generations.

Thank you very much for taking the time for listening to this presentation today and for participating in the preservation of our heritage collections.

End of narration

[Image of the bound book with a red cover entitled “Care of Heritage Collections closes and the sound of a page turning]

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