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THE CANTERBURY DISASTER SALVAGE TEAM
Working Towards Saving Cultural Collections

NEWSLETTER

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Editor
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This Issue:

Attaching Catalogue/Accession Numbers to Collection Materials

Labelling Collections
General Considerations

Why

Labelling refers to the process of permanently affixing an identifying number (accession or catalogue) to an collection item for the purpose of inventory control and to connect the object to all associated documentation. Loss of this number can be just as problematic as loss of the object itself, especially if adequate identifying documentation such as a photograph does not exist. And let's be honest, this is more common than we would like to admit.

Where

Developing a standard location for labels on various types of objects, eg shirts, chairs, jewellery etc. reduces the risk of damage from excessive handling. When people know where to look, they don't have to search around trying to find the number. Make sure the location is discrete yet easy to find. Don't pick a location that will distract from or destroy the aesthetic and future exhibit potential of the object. For example, a good place for labels on a shirt or vest is the back inside bottom edge of the body or sleeve. Placing a label inside the shoulder of a shirt can result in tears and creasing as it is necessary to fold material or undo fastenings to read it.

If the object consists of more than one component the number must be affixed to each separate piece, if possible. Exceptions are tiny fragments or components that are too small to be labelled. In these cases, the pieces can be placed inside a sealed container or bag with the catalogue/accession number marked on the outside.

It can be beneficial to record the label location in either the object's catalogue/accession record or in the cataloguing/accessioning procedures.

How

The next article, "Labelling – Materials and Techniques" will discuss some common museum methods for labelling objects that are considered 'safe' by conservation standards.

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Labelling – Materials and Techniques

NEVER right directly on the surface of an object. Inks will penetrate porous surfaces leading to irreparable staining and pens can scratch or damage other surfaces that appear very stable.

Protective layers: One below the number to protect the object, one on top to protect the number and the information it contains. Two materials that can be used to create these layers are Paraloid B-72 or clear nail polish.
Pens: Various options are possible. Two common ones are drawing pens **(such as rotring isograph graphic pens)** and metal nib pens. Both are available from art or graphic supply stores.
Inks: Black India ink or white drawing ink. Both are available from art or graphic supply stores.
Fabric tags: White or natural Tyvek or cotton/linen tape. Do not use coloured materials as dyes can transfer to the object.
Thread: White or natural cotton or cotton/polyester blends only. As with tag materials, do not use coloured materials as dyes can transfer. Nylon filament can cause damage to collection objects and deteriorates over time.
Location: Choose an inconspicuous area of the object that won't be rubbing against another surface. Remember, at some point the object is likely to be put on display and very rarely does the number enhance the aesthetic of an object. Back, bottom or inside surfaces work best.
Size: Keep the area for the label to the minimum size necessary in proportion to the size of the object while ensuring that the number is legible. For example, don't make the accession number for a piano three millimetres tall unless it's a piano for a dollhouse.

A. Unpainted wood, ceramic, metal, glass, horn, bone and ivory:

- Apply a thin layer (similar to thick paper or folder card, approximately 1 mm thick) of Paraloid B-72 (B-72) to the surface of the object.
- Leave the B-72 to dry thoroughly before proceeding. This may take several hours. To test, poke the centre with a toothpick. If dry, the surface won't indent.
- Using light pressure write the number on the B-72 layer with white (for dark coloured objects) or black (for light coloured objects) ink. Alternately, with dark coloured materials, some prefer to lay down a layer of the white ink, let it dry and then write on this with the black ink.
- Do not drive the tip of the pen through the B-72 and stay well away from the edges. The idea is to keep the ink from contacting the surface of the object. Allow the ink to dry completely.
- Apply the second protective coat of B-72 over the number. Use one continual smooth motion as the B-72 will erase the number if over manipulated.
- Allow the second coat to dry completely before placing the object in storage.

B. Painted, Coated or Lacquered Objects

- If an inconspicuous spot exists without the paint etc., use the instructions for applying B-72 labels to unpainted objects.
- If no such space is available, it may be necessary to sacrifice a small area. Choose an area that will not be problematic in the future and use the B-72 labelling method for unpainted objects.
- Tags can be used, but as a last resort since the risk of loss of the tag and loss of associated information is higher than a number applied directly to the surface.

DO NOT:

- Apply B-72 to plastics, rubbers, painted or coated surfaces (exceptions outlined below), paper, cardboard, fabric, leather, lacquer, or fragile/ powdery surfaces. The solvents will damage them and may accelerate or initiate deterioration leading to loss of the object.

DO NOT use;

- Self-adhesive labels, paper or other. The adhesives deteriorate quickly and the labels detach. The adhesives can also often stain the surface and may exude components that will increase the deterioration of the object itself.
- White out, Twink or similar formulations. Along with staining problems, the constituents are difficult to get information on, change frequently and do not have long term stability.

C. Textiles, Costumes and Leather/Skin/Fur Objects

- Make a fabric tag from Tyvek or cotton/linen tape that is big enough for the number to fit on legibly. With fabric tape it may be necessary to sew or finish loose edges to prevent fraying. Tyvek and is a non-woven fabric so will not fray.
- Using a permanent ink marker, apply the accession number to the top surface of the fabric tag. India ink can be used, but is a bit fussier.
- Allow ink to dry.

Fabrics

- Sew tag to garment with one to two stitches at each end. Another may be added in the centre top and bottom if the tag is very large, but keep the stitches to a minimum. Use as thin a needle and thread as possible to avoid damages. Use existing needle holes if present, especially if the fabric is coated or painted. If no previous holes are available, carefully insert the needle between warp and weft threads in order to prevent damage to the threads.
- Use loose stitches and do not knot the thread. This can lead to damage, especially if the tag ever needs to be removed.

Leather/Skin/Fur

- As for fabric, use pre-existing holes if available, but only if in a robust area. Do not make new holes in the object.
- If no holes are available, but there is a strong component onto which a tag can be tied, attach thread to the tag and tie it on.
- Labels can also be adhered to the inside of leather/ skin/fur objects. Consult a conservator for the best method.

DO NOT:
- Sew through deteriorating or fragile fabric/leather/ skin etc. Powdering silks and leather with red-rot are particularly susceptible.
- Sew through coated or painted surfaces. They are often brittle and fragile.

D. Paper and Cardboard
- Ensure that the surface to be used is sound and surrounding deterioration (i.e. mould staining) is not going to contribute to loss of the number or make it difficult to read.
- Use soft pencils such as 2B or 3B.
- With light pressure print the catalogue/accession number onto the object's surface.

E. Plastics and Rubbers
- Use a 2B or 3B pencil if the object has a surface that lends itself to writing. Acrylic paint or a fine wax pencil can also be used.
- Use light pressure to prevent surface scratching or indentation.
- Generally, it is better to use an acid-free, non-buffered paper tag with a white or natural coloured cotton string. Attach it to a strong component ensuring that the tag cannot be easily torn off.

Natural History Collections
- Some of the methods described so far can also be used in labelling Natural History collections. However, there are some considerations specific to these collections and consulting someone experienced in this area is the safest course of action.

Re-labelling
- Every so often, for a variety of reasons, it is necessary to apply a new or reapply the old number.
- Always take care not to remove old labels or numbers until it has been determined that the label can be removed without loss of significant information.

Special Materials
Extra care is needed when applying labels to some materials in order to prevent causing accidental damage. Examples include modern synthetic materials and fabrics, inherently fragile objects such as glass models, and actively deteriorating materials with fragile powdering surfaces.

Health and Safety
The fumes produced by B-72 solutions and nail polish can be a health risk with extensive long term exposure. At the very least they can be very irritating to individuals with sensitive sinuses or prone to allergic reactions. Provide a well-ventilated area for doing labelling, or better yet a fume cabinet.

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Numbering Museum Artefacts: Nail Polish VS. Acryloid (Paraloid) B-72

Recently, I investigated the use of clear nail polish for use in affixing catalogue/accession numbers to museum artefacts. Problems with Acryloid *(Paraloid)* B-72 in Acetone had cropped up periodically, and we were faced with the task of numbering many artefacts in a short period of time.

Museum staff had noticed that the B-72/Acetone mixture dried very quickly, leaving trails of the solution stringing between the artefact and the brush. Also, bubbles appeared in the dried film, interfering with the application of the number on this bottom, separating layer and with visibility of the number through the top protective layer. So, I took a look at nail polish, which has been used by many institutions around the world.

Nail Polish
Advantages:
- Easily removable
- Prevents the absorption of ink into the surface of the object
- There are no materials to measure and mix
- It is portable, so it can be taken into the field
- It is inexpensive and easy to obtain
- It is quick and easy to use

Disadvantages:
- Primary ingredient cellulose nitrate, therefore poor ageing properties
- Risk of damage to some types of objects from the deterioration products (nitric oxide, nitric acid)
- Quickly yellows and gets brittle, flaking off
- Due to above, must be removed and re-applied more frequently costing time and money
- Solvents in solution (acetone for one) a significant health risk

It seemed clear to me that the extra time and effort should be spent to use the superior B-72 solution. It could be mixed at different ratios to minimise the quick-drying problems and applying the solution in a still-air environment would help reduce bubbling. However, a closer inspection of B-72 revealed that it had more problems than I had thought.

Acryloid (Paraloid) B-72
Advantages:
- Easily removable
- Prevents the absorption of ink into the surface of the object
- It is available in both clear and white
- Primary ingredients acrylic polymers with good ageing properties
- Will not yellow as quickly over time and less likely to get brittle and flake off
- Does not need to be redone as often

Disadvantages:
- Poor working qualities
- Can be difficult and time-consuming to mix, need

special equipment
- More expensive
- Solvents used to make solution (acetone or toluene) a significant health risk

Conclusion
It is necessary to carefully assess the risk to an object of using either material and balance this with the issues of health and safety as well as working qualities.

Generally, B-72 is considered the better option from a conservation point of view, but depending on circumstances it may be possible to use nail polish on some materials – with caution.

References:
Alten, Helen "Labelling Ethnographic Objects", *ICOM Ethnographic Conservation Newsletter,* Number 17, April 1998, pp 18-21

National Park Service "Use of Acryloid B-72 Lacquer for Labeling Museum Objects" *Conserve O Gram*, Number 1/4, July 1993

Angela Staple, Collections Management Intern Canterbury Museum

Paraloid B-72 Solutions

Paraloid B-72 is an acrylic resin (an ethyl methacrylate co-polymer) that is commonly used by conservation professionals as a consolidant, adhesive or protective coating. It is considered relatively stable.

While the resin itself has no associated health risks, the solvents used to dissolve the resin do and can be difficult to use as most evaporate very quickly. Those commonly used are acetone or toluene, sometimes mixed with denatured ethanol (Industrial Methylated Spirits – IMS).

Paraloid B-72 can be purchased as a solid resin bead (best for long term storage), or premixed in a solvent (better for short term use as the solvent will slowly evaporate thickening the solution). The premixed solutions can be thinned by adding more of the original solvent. For labelling, a solution the consistency of whole milk or thin cream works best.

Because the solvents evaporate quickly, people often report difficulty using thicker solutions as they dry too quickly or become "stringy". Thicker layers can also develop bubbles as they dry. The quicker the drying time, such as in conditions of higher temperatures or high air flow, the greater the amount of bubbling that can occur. Adding IMS decreases the drying rate and can help solve some of these working difficulties.

Contact a conservator in your region if you wish to mix your own solutions of Paraloid B-72. They can advise you as to method and the necessary safety precautions.

Always follow appropriate health and safety precautions/regulations whenever using any of the solvents listed in this article. Material Safety Data Sheets (MSDS) are available for these materials on the internet or from the supplier.

Suppliers
Conservation Supplies Limited
Phone: (04) 939 9910, Fax: (04) 939 9911
PO Box 54204, Mana Porirua
- Sell both the resin and premixed solutions.

Book Review

Library disaster planning and recovery handbook. Camila A. Alire (Ed.). New York: Neal-Schuman; 2000. (International Standard Book Number: 1555703739), 616 p.

On the night of July 28, 1997 it started to rain at the Colorado State University campus. The next day, after flash flooding had burst its way into the Morgan library building, the 7200 square metre basement was submerged. Over 500,000 monographs (approximately half the book stock) and the entire journal collection were affected. This book describes the response of Camila Alire, Colorado State University Dean of Libraries, and her team to this major disaster and the process to recover, replace and rebuild the damaged collection.

This work is organised into six parts. Part I deals with the disaster from a management perspective. Part II focuses on disaster recovery in relation to public services whereas Part III reflects on the technical services areas affected by disaster recovery. Part IV covers the major gift solicitation process that took place. Part V is a comprehensive account of the efforts to restore the collection. Part VI covers the concept of resource sharing in disaster recovery. Each part concludes with a list of key recommendations based on what was experienced at Colorado State University.

This highly recommended book provides a graphic description of a major disaster salvage operation, and describes what worked and what did not work. It would be most helpful to anyone writing or revising a library disaster plan. As Alire states in the preface: "A tale beginning with the ferocity of nature ends with a story of human determination ... we offer our experience ... as a way to prepare your library for a future filled with uncertainty".

Graham Penwell, Management Services Librarian, Lincoln University Library.

All book review and article submissions welcome!
Next Deadline: 1-August-02.
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