THE
ETHNOGRAPHIC CONSERVATION NEWSLETTER
of
The Working Group on Ethnographic Materials
of
The ICOM Committee for Conservation

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CONSERVATION DEPARTMENT
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CO-ORDINATOR'S REPORT

Dear fellow members of the Working Group,

Sue Walston is a hard act to follow whatever the act is. I will need all the help you can give me to keep up the level and quality of output which she has set and which you have come to expect. I thank you in advance for your support.

First some facts about the newsletter. This group receives about $US400 p.a. for postage and printing expenses. There are about 450 people who request a copy and we hope to print 4 newsletters a year as you all can see we cannot continue to run at such a loss. Would all of you who work in the same lab or institution get together and request one copy only. You can all make as many copies as you like. We just do not have the money to keep up the volume we and you would like.

Now a few words about the Dresden conference. It is always wonderful to meet all your colleagues and friends from around the world every 3 years. As I could not go to Sydney, it was six years since I had seen everyone. Dresden was an interesting place to be at an interesting time. A momentous few months in the history of Europe and we were there in the middle of it.

During the conference the East German Ministry of Culture was abolished. One Friday it was there and the next Monday it was gone. The same for the Museum of History in East Berlin, one Monday 270 people had no jobs. With all this going on a paper had to be very good to be memorable. A special thank you to all who produced papers.

The Ethnographic Working Group is attracting the attention and interest of members of many other working groups, let us remember this for 1993 in Washington! There will be a lot of competition for the interest of our members and indeed for all those attending the conference. There are

subject and start planning your papers now. Write to me or to Sue Gatenby and tell us the area you want to explore. Write to the newsletter and ask your colleagues for help, for information, for support. Let every paper presented at Washington in 1993 be both interesting and informative. It is not a prerequisite but papers pertinent to the program would be of the greatest interest.

Now we come to our program for the next 3 years. Quite frankly each one of the points in the program is going to take much longer than that to explore fully and most of them are ongoing problems for anthropological Conservators anyway, however we want to highlight them in Washington. Let us write about them in the newsletter, discuss them and encourage really good papers in 3 years time.

CLEANING:- The Richard Wolbers techniques and their adaptation to cleaning ethnographic material. Perhaps one or more conservators who attended the enzyme symposium in October would like to contribute papers.

ETHNOGRAPHIC CONSERVATION ETHICS:- Working machines, Historic houses, functioning mills, industries, how do we treat them?? Sacred objects, what is the professions position on treating these? Should we treat them? What is a sacred object? What does repatriation mean to us and how should we react as conservators?

IDENTIFICATION OF BINDING MATERIAL, PIGMENTS and FIBRES:- We want to establish a data bank of this information, please make a deposit!

DISASTER PLANNING:- We need case studies for the treatment of ethnographic material.

Please get those letters rolling in.
What we want is not only a publication where papers can be published but a real NEWSletter with all the odds and ends which we discover disseminated so that there is a chance they may become the piece in the jig-saw puzzle which completes the whole picture. Remember the newsletter is only what you make it.

Richard Renshaw-Beauchamp,
Tideview Conservation,
6555 Tideview Rd RR1
Sooke B.C.,
Canada VOS 1NO

EDITORIAL

Firstly, I would like to welcome Richard Renshaw-Beauchamp as the new Co-ordinator of the working group and hope that the next three years is a most productive one. I would also like to say thankyou to the previous and founding editor of the Newsletter, Ann Howatt-Krahn. I hope I can keep up the fine standard that she has set.
The aim is to have four editions of the newsletter each year because regular contact between members of the working group is essential if ethnographic conservation is to be alive, interesting and relevant.

The newsletter will have three main sections: What's on in ethnographic conservation - region by region (in this edition Australia and New Zealand); a theme article which will discuss particular subjects as determined by the members (such as program items mentioned in the co-ordinator's report); and technical notes - brief articles which provide ethnographic conservation techniques found to be useful which conservators would like to share with others.
This newsletter is dependent on YOU, members of the working group, being active, by suggesting topics you would like to see discussed, suggestions for improvements to the newsletter and articles for inclusion. Please make some contributions.

Also, a new section has been suggested on useful articles in other journals and newsletters which ethno. conservators are not likely to come in contact with. There is a lot of information in other areas of conservation and outside it which readers may find useful. Again, the success of this section is dependent on contributions from readers.
This newsletter is ESSENTIAL but the cost of production and particularly the mailing costs are high. I would like to explore ways of reducing this cost. Are there any ideas??

David Horton-James,
Materials Conservation Division,
Australian Museum, 6-8 College St,
Sydney, NSW, Australia.

WHAT'S ON IN ETHNO CONSERVATION: Australia and New Zealand

STATE CONSERVATION CENTRE OF SOUTH AUSTRALIA

Sarah Slade, Lyn Pinkus and Mary Canny are conserving part of the Art Gallery of South Australia's bark painting collection as part of a conservation maintenance program.

Lyn Pinkus is also involved with a progressive conservation program for Flinders University's Australian Aboriginal and

Pacific Island collections. Objects being conserved include painted boomerangs and woomeras by Albert Namatjira, Tiwi figures (Bathurst Is) and Papua New Guinean masks.

Amber Xavier is formulating a treatment approach for the repair and mounting of Fijian and Papua New Guinean Tapa belonging to a private owner.

Sarah Slade
State Conservation Centre of S.A.
70 Kintore Avenue
Adelaide SA 5000

ART GALLERY OF NEW SOUTH WALES

Aboriginal and Melanesian collections were established at the Art Gallery of New South Wales in the 1950's. They include Aboriginal artefacts from Northern Australia, such as bark paintings, grave posts, carved figures and body ornaments. Represented in the Melanesian collection are figures, masks, shields and body ornaments from the New Guinea Highlands and Sepik regions as well as from other parts of the country and neighbouring islands.

The Aboriginal and Melanesian collections are made from a variety of fragile, organic materials such as feathers, plant material and resin. In the late 1960's and early 1970's some treatments were applied to Aboriginal bark paintings. Records are brief and Renee Free's account in Tony Tuckson, Craftsman House (1989) sums up most of what is known.

Tony (Tuckson) previously designed the way barks were mounted, on green hessian over Masonite, with tiny holes in the corners for threading through copper wire darkened by flame, and which had "give" to accommodate any slight warping. At that time it was considered best to flatten the barks by the use of a vacuum table in the Conservation department.

It is known that flaking pigments on bark paintings were consolidated with Bedacryl 122x (methacrylate) and the reverse side of barks were sometimes painted with polyvinyl acetate emulsion in an attempt to reduce warping. These treatments were applied to objects in at least one other major collection of bark paintings and their long term affects have been observed by several conservators.(note that this is an historic practice and not current - ed.)

In 1988 the Gallery employed its first objects conservator responsible for ethnographic art, decorative arts and sculpture. A conservation plan for the Aboriginal and Melanesian collections is being developed. It includes improved environmental conditions, insect control and support for objects, both in storage and on display.

The Art Gallery of New South Wales houses a significant and growing collection of Aboriginal art. Appropriate display of these materials is essential for its long term preservation and enjoyment by the many overseas and local visitors who visit the Gallery each year, specifically to see Aboriginal Art.

Donna Midwinter
Objects Conservator
Art Gallery of New South Wales
Art Gallery Road
Sydney NSW 2000

THE MUSEUM OF VICTORIA

In the past twelve months, a number of projects have been undertaken in the Conservation Department related to ethnographic conservation. Two major collection surveys were carried out on the Oceanic and Aboriginal collections by Michelle Berry and Craig Dukes respectively. These surveys were done in order to gauge some ideas of their condition, the amount of work required to conserve them, and to plan work programs for the future. It was also done to formulate work programs for the conservation of exhibition items for the new Museum of Victoria which is hoped will be built in the next five years.

Michelle Berry is currently working on a number of objects from the Vanuatu collection. Many of these objects are made from vegetable pulp fibres, ochre, tusks and wood and are extremely fragile. The main focus has been to clean the large amounts of dirt which has accumulated over the years and stabilise the vegetable pulp fibres. This has generally been achieved (quite successfully) by relaxing with water and moulding back into shape then adhering the loose pieces with a 2 - 5% w/v methyl cellulose in water solution. Work is currently being undertaken on a large mask from Vanuatu consisting of a solid tree fern trunk core to which a bamboo frame extension has been added. The tree fern is covered with moulded vegetable pulp.

Craig Dukes has been working on a number of Aboriginal bark belts and paintings from Northern Australia. The main work has involved pigment consolidation using a range of consolidants including methyl cellulose, carboxymethyl cellulose and Klucel products. It has been found that a consolidant which works well on one object will change the colour of the pigment on another to an unacceptable level. Most solutions have been 2% w/v in water. Split areas of bark have been lined with Japanese tissue paper which has been dyed with leather dyes to an appropriated colour. These have been adhered using 5% w/v carboxymethyl cellulose in water.

Craig Dukes,

Conservator,
Museum of Victoria,
328 Swanston Street,
Melbourne VIC 3000

THE QUEENSLAND MUSEUM

The Queensland Museum's ethnography collection is divided into two main sections - Oceanic and Australian. The Oceanic section holds some 30,000 items from the pan-Pacific region, SE Asia as well as tribal material from worldwide. The Papua New Guinea collection is significantly larger than the rest, totalling 16,000 items, some of which have still to be repatriated to the National Museum Papua New Guinea. The Australian section holds approximately 16,000 Aboriginal artefacts excluding archaeological finds, which increase in number annually and all require accessioning and proper storage. All these collections are housed in the one store room, 40.05 metres long by 15 metres wide. Storage facilities consist of open, adjustable shelving of enamelled steel and chip-board; compactus shelving (enamelled steel) with drawer-space for small items and large wooden cupboards with both drawer space and shelving. The cupboards (relicts from the old museum building) are particularly useful for feathered-material and skins as they are reasonably insect-proof. The internal climate is well maintained 55 ± 3% Relative Humidity and 22 ± 2°C.

The entire Anthropology collection was moved from the old museum building to these new premises in 1986, and is still undergoing reorganisation to permanent storage locations. Much of the conservation being done at present is preventive: as objects are relocated they are placed on support systems of sculpted ethafoam lined with 3mm polyethylene foam or acid-free tissue plus a variety of other storage materials. The compactus shelving was acquired pre-lined with thousands of polystyrene sheets. It would be far too expensive to replace these with polyethylene foam so they are being covered with tyvek and acid-free barrier paper. Very delicate items are placed in trays lined with dacron and acid-free tissue.

Laboratory treatment has been carried out on several items in the collection - notably some extremely brittle, acidic barkcloths from Northern Province, PNG, with hundreds of tears and holes from poor storage condition and tight folding. The cloths were relaxed, de-acidified and flattened and their tears backed. They were returned, flat, to the open-shelving on tissue-covered ethafoam planks. Large trays made of marine plywood, yet to be constructed, will house them in the future. Those too large to be stored flat will be rolled loosely on to 100-150 diameter ethafoam rods.

The conservation section is also involved with display work, preparing artefacts for exhibition and advising on (and sometimes constructing) mounts and stands. There are three ethnographic displays at the QM currently. A Melanesian display of some two hundred items; a rain forest display containing 61 artefacts of the Djirbil people and a Queensland Aboriginal display comprising 220 artefacts. The latter involved extensive conservation input because the display was intended to represent a stored collection and used conservation mounts of plastazoate, ethafoam, superfoam and tissue-covered dacron.

Another storage project to be under way early in the New Year is the construction of contour-conforming mounts for a collection of 100 bark paintings. To make these, expanded epoxy or silicone are being considered as alternatives to polyurethane or polyester resin. The bark paintings will then be stored horizontally on their supports, lined with cushioning of superfoam and acid-free tissue, in narrow-shelved cupboards.

Rowena Hill,
Conservation Department,
Queensland Museum,
South Brisbane, Queensland 4000

THE AUSTRALIAN MUSEUM

As an integral part of a project to move the Anthropology collections to a new store, Graeme Scott and Michael Kelly have been designing and constructing mounting systems for many of the objects. These provide support both during the actual move and for long term storage. The move project is due to end in December 1990 but our commitment to improving storage conditions will continue. Mounts are made mostly from wood, acid-free board and polyethylene foam. Frames, trays and racks are constructed for collections of similar objects. Whatever the support system used each object's characteristics and problems are taken into account - powdering or fugitive pigments, weak and embrittled structures, delicate decoration etc.

The work has included the preparation of about 1000 foam mounts for pottery, supports for large dance and ceremonial masks from New Britain and the Gulf Province of Papua New Guinea, frames to contain collections of palm-spathe paintings, tobacco pipes, axes and clubs, and the movement of about 30 canoes of various sizes.

Over the next four months, Sue Gatenby will be trialing a number of different staining techniques to determine a suitable method for the identification of binding media which have been cited as being used on painted australian aboriginal wooden objects. Tests will involve biological staining techniques and also a series of tests which were presented at the recent Getty Conservation Course on the

Consolidation of Ethnographic Painted Surfaces (June, 1990). Fluorescent dye tests using using the Wolbers technique will also be investigated. Specifically, for oils and fats: Sudan Black B, triglyceride test and the flourescent dyes Rhodamine B and 2,7 dichlorofluorescein. Proteins, including blood: Ponceau S, Acid Fuschin, a protein test used in forensic science and the GCI Protein and Heme Test and fluorescent dye Fluorescamine. Resins and Gums: Toluidine Blue and fluorescent dyes triphenyl-tetrazolium chloride and Bromocresol purple. Gums have proven to be more problematic and the actual tests have not been determined. The particular type of gums that Sue is interested in are those from orchids and some analysis will be carried out to help in identifying an appropriate test procedure.

Margaret McCord is undertaking a survey of the textile and mat collections to determine their condition and conservation requirements. These objects are from the Australia Aboriginal, Asian, African and American Anthropology collections and include a particularly important collection of Balinese painted hangings which are classed as textiles for the purpose of this survey. Recommendations will be made for the preventive conservation of the collections in keeping with the current program of upgrading storage. Objects in need of interventive conservation will be identified as urgent or non-urgent and a time estimate given for the treatment involved. The graded and quantified workload will then become part of the Conservation Division schedule.

Penny Edmonds and David Horton-James are currently looking at the removal of mould staining to acylic painted wooden surfaces with the use of enzymes. In particular, several Australian Aboriginal painted wooden shields and food dishes were subjected to extremely high levels of humidity during their collection in the Northern Territory and they arrived at the museum with a severe mould problem. Pilot tests are now being conducted to assess the efficacy of enzyme gels to remove the mycelial debris from the acrylic paint surface. Enzymes specific to components of the cell wall of the micro-fungi are being trialled. The employment of atypical enzymes, the sensitivity of the acylic media to heat and most solvents and the convex shaped wood means that there are many application constraints. If any object conservators are employing enzymes in the same capacity we would certainly like to here from you.

Mark Gilberg is presently investigating the use of pheromone traps for monitoring insect infestations in the anthropology collection storage areas. A cigarette beetle infestation was accidentally introduced last July during the transfer of objects from an existing off-site storage area to the new collection storage facilities at the Museum. The placement of cigarette beetle pheromone traps throughout the new storage areas has made it possible to easily locate and identify the source of the original infestation.

Karen Coote and Colin MacGregor have been working intermittently over the past few years on the conservation of seeded objects (from Irian Jaya) adhered to sago spathe with resin. They have progressed a long way in the difficult area of analysing these previously unidentified resins. In addition they hope to be publishing a specific storage study/display system that has been developed for this very fragile material in 1991. The aim in this storage project is to provide even support. To this end glass-fibre reinforced polyester resin supports have been cast to follow the contours of the underside of the objects precisely, thereby preventing any flexing of the objects which causes loss of seed and pigment from the decorated surface.

David Horton-James has been appointed Head of the Materials Conservation Division at the Museum for a period of two years.

David Horton-James,
Head, Materials Conservation,
Australian Museum,
6-8 College Street,
Sydney, NSW, 2000.

QUEEN VICTORIA MUSEUM AND ART GALLERY

The bark cloth collection of the Queen Victoria Museum and Art Gallery has recently been conserved and put on display. Comprising nearly 50 pieces from Papua New Guinea, Soloman Islands, Fiji, Futuna, Tonga and Samoa, the collection was previously stored in a couple of cardboard boxes in an attic storeman. As a consequence, individual pieces were very dirty, badly creased, some were mouldy and water stained and many large rat holes and other signs of insect damage. The collection was poorly catalogued and inaccessible to the public. We were fortunate that a local gentleman with a detailed knowledge of Polynesian and Fijian bark cloth was able to look over the collection before conservation commenced. Information he passed on regarding the manufacture and use of bark cloth prevented interesting information (e.g. creases formed during wearing) from being lost during conservation treatment.

Pieces were examined and photographed. The solubility of colours in water was tested as was the pH. Cloths were unfolded and placed between sheets of white blotting paper dampened with deionized water. After 1-3 hours, the cloths were sufficiently flexible to flatten. They were placed between dry sheets of blotting paper under light weights (e.g. papermaker's felt) for 24 hours. Although some of the colours were slightly fugative, we encountered no problems with colour losss or bleeeding during the flettening process. All cloths were cleaned by vacuum brushing. Insect debris was removed manually. No wet cleaning was attempted

because of possible loss of colours and natural adhesives from the barks. One very dirty example from Futuna was cleaned with "Draft Clean" eraser granules (its surface was very smooth).

Many pieces of cloth, especially those from Papua had twig holes, i.e. holes occurring in the bark where branches have been removed prior to beating. Care was taken not to mend these holes. Tears and insect holes were repaired by backing them with long fibre japanese tissue, torn slightly larger than the tear/hole and adherred using rice starch paste. Generally, the repair tissue was not coloured so mends would be clearly visible. Where the cloth was coloured on both sides, repair tissue was dyed to a sympathetic colour using acrylic paints. Small holes were then filled with a pulp made from maccrated Japanese tissue. Larger holes were filled with pieces of Japanese tissue of equivalent thickness to the bark,torn to the exact shape of the missing area and adhered using rice starch paste. All fills were inpainted using water colour paints.
The cloths were either displayed flat or hanging, wedged between two pieces of 2×1 inch hardwood, screwed together along the sides and top. This way of hanging was quick, inexpensive, allowed almost the entire cloth to be seen and caused no damage to the object.

Unfortunately, there is insifficient storage space in our Museum to store the bark cloths flat. Eventually, they will be rolled onto 6 inch diameter cardboard tubes (as used for pouring concrete posts) that have been covered with aluminium foil and layers of acid free tissue paper

Ms Linda Clark,
Queen Victoria Museum and Art Gallery,
Wellington Street,
Launceston, Tasmania, 7250.

NATIONAL MUSEUM OF NEW ZEALAND

The Cultural Conservation Advisory Council has recently hosted a ten day conference to discuss the spiritual significance of Maori, Taongi and the resultant implications for conservation and curatorial care of Taonga within institutions. This created a forum for visiting curators from key collecting institutions from around the world, New Zealand museum professionals and the Maori community. Participants addressed the conference on current policies in their institutions towards Maori material and to provide a dossier and slides of their Maori collections for future reference in New Zealand.

Object conservation treatments at the National Museum recently, have included the following objects: large wooden Maori house, canoe carvings, and Maori kites. Textile conservation treatments have included treatment to a Maori widow's cap, dogskin cloaks and a number of kites. Development of new storage systems for the Maori collections is continuing.

Rose Evans,
National Museum Of New Zealand,
P.O. Box 467, Wellington,
New Zealand.

(the following article appeared in the last newsletter in French and according to our policy where a translation is provided - in French or English - it appears here - ed.)

THE INUIT SKIN PREPARATION WORKSHOP

The Canadian Conservation Institute organised a five day workshop on Inuit techniques for the preparation of seal and caribou skin held in late August at the Northern Studies Centre in Churchill, Manitoba, the "Polar Bear Capita of the World". Participants at the workshop came from museums in Canada, the USA and Europe.

Instructors on the course were Jill Oakes and Rick Riewe, both from the University of Manitoba, in Winnipeg, and Elizabeth Nibgoarsi and Leah Okatsiak of Arviat, Northwest Territories. Both Jill and Rick have had extensive experience in the preparation, manufacture and use of skin clothing in the Arctic. Elizabeth and Leah are expert Inuit seamstresses with many years of experience in the manufacture of traditional skin clothing. The scraping and other techniques we were shown generally reflected the methods used on the west coast of Hudson's Bay, the area that Elizabeth and Leah are from. Nevertheless, because Jill Oakes and Rick Riewe have had experience in the skin preparation methods in many parts of the Arctic, participants had the opportunity to try a variety of techniques and tools used in areas from Greenland to Alaska. They had the chance to work with caribou skin and the skins of both Ringed and bearded seals. It was especially useful to experience the range of difficulty in preparation between the different caribou skins and between the caribou skins and the seal skins.

Blubber removal from the seal skins (the polar bear's favourite food) was done in a small look-out tower approximately 500-600 metres away from the buildings at the Study Centre, so as not to attract bears to the main complex. As a result, this is probably the first conservation workshop that required the presence of an armed guard to patrol the perimeter of the work area. Once the difficult task of blubber removal was complete, the hair of one skin was shaved leaving the epidermis intact, another had both the

hair and epidermis removed and the third was left with the hair on. All three were stretched on a wooden frame to dry. The skins were softened by chewing or tramping the bundled skin on the ground.

Caribou skins with the hair intact were softened by scraping the flesh side with a blunt metal-edged tool for several hours followed by a lengthy scraping with a sharper edge. The Inuit instructors mentioned that the skins we processed probably would have been whiter and softer if they had been scraped in cooler temperatures. While this undoubtedly had some truth in it, we felt they were being diplomatic in explaining our less than perfect results.

The isolated location of the Northern Studies Centre, 10 miles outside Churchill on th tundra, gave rise to work days that ran 13-14 hours. Preparation of the skins took place during the day while the evenings were devoted to lectures and discussions of skin preparation techniques across the Arctic, Inuit culture and technology, and the conservation of skin and leather artefacts.

Jill Oakes had brought along part of her collection of contemporary Inuit clothing from various areas of the Arctic and during the last evening an Inuit fashion show was held. Everyone had a chance to try on the various styles. For conservators who often work with very old and fragile caribou and sealskin clothing, it was a special treat to be able to wear skin parkas and boots, to feel the kind of movement one has in them, how they flex and how quickly one gets warm in them.

Given the positive comments of the participants concerning the usefulness of the workshop, CCI may offer it again.

Tom Stone,
Chief - Ethnology/Furniture and
Wooden Objects,
Conservation Services,
Canadian Conservation Institute,

THEME ARTICLE

BINDING MEDIA LIBRARY

This project was initially suggested by a group of conservators who attended "The Consolidation of Painted Ethnographic Surfaces" workshop, at the Getty Institute, in Los Angeles, USA and was later endorsed at the Dresden ICOM conference by the new coordinator for the Ethnographic Working Group, Richard Renshaw Beauchamp. Richard has established that the project would be given a high profile by the group for the coming three years.

The idea is to start a library that will hold both samples and articles with reference to binding media, such as resins, gums and other exudates, used on ethnographic objects from around the world.

Initially we are trying to establish what information or binding media collections are already in existence, where they are located and how extensive they are. We have printed out a questionnaire which we are trying to distribute as widely as possible. (This questionaire is included with the newsletter on a separate sheet. Further copies are available from the editor - ed.) We are interested to know both what does or does NOT exist so please don't worry if your answers are all negative. The information that we are trying to locate may be in the form of publications, film, sample collections and we are particularly interested in locating objects that have known well documented binders.

Following this we will do extensive literature searches in areas such as botanical studies, sugar chemistry, early paint industry research, in essence anywhere we think a small gem of information may be buried. For the project, I will be acting as the collection point and the library will, for the present, be kept at the M.H. de Young Museum in San Francisco, California. At this stage in the project we would like to encourage all of you to participate by filling in the questionnaire with all your suggestions. I will keep in touch through the Newsletter and to keep you informed through all the phases of the project. Individuals have already shown great interest in various aspects of the project and they will be given every encouragement to pursue their areas of interest. One of the aims of the project is to create opportunities for some of you to do some very interesting research.

Lesley Bone
Ethnographic/Archaeological Conservator,
M.H. de Young Museum,
Golden Gate Park, San Francisco, CA 94118, USA.

TECHNICAL NOTE

USE OF PHOTOGRAPHIC IMAGES TO REPRODUCE PARTS ON ETHNOGRAPHIC OBJECTS

An investigation was carried out to determine whether photographic images could be used as an alternative to traditional gap-filling methods, often used in ethnographic conservation, to reproduce missing parts.

This technique was considered worthy for investigation because it is less damaging to objects compared to many other gap-filling methods and remains completely reversible. The photographic image can be easily distinguished from the

original material although it resembles the material form, colour, texture and gloss of the object. A further advantage is that the process is less time consuming for the conservator once a standard procedure is developed.

This article was written because during our investigations it became obvious that several key steps should be considered for a satisfactory result.

What needs to be considered before taking the photo?

1.Type of lighting in which the object is to be displayed. (The colour temperature of the light source will affect the appearance of the print and the object.)
2.Lighting angle to be used in the display. (Shadows may be cast onto the print.)
3.Appearance of the object itself. (colour, gloss, texture, etc.)
4.Choice of film format/scale of the area to be used as the replica. An enlargement for small sections works well but similar sections used repetitively becomes obvious. If a large area is to be reproduced, a large format camera will be better because there will not be as many problems with the "grain" of the print, which will be magnified by enlargement.

Prior consideration for these items before the photo is taken will reduce unnecessary delays and cost. If you are not taking the photo yourself, it is essential to discuss your requirements with the photographer.

PHOTOGRAPHIC SYSTEM

The ILFORD CIBACHROME system was recommended to us for the work because it produces high quality reflection prints with brilliant and saturated colours showing good sharpness and definition as well as having excellent stability to light fading.

CIBACHROME has a life expectancy of over 100 years compared to the stability of ordinary prints, which amount to 10 - 20 years, stored under dark conditions. However, the dye stability decreases at elevated temperatures and particularly at high relative humidities. Ultra-violet light will also damage the print. If the prints are to be exposed to these conditions, they should be laminated or a protective layer applied to the print surface. (Damage could be manifested by polymerisation of the plastic base, emulsion crazing, emulsion separation and/or embrittlement and dyes faded or shifted e.g. red background becoming pink.)

Method of producing the photographic image

On the emulsion side, print papers have nine layers. The 3 primary colours are separated by dye-free-layers. These dye-free layers influence the bleaching of the adjacent dyes when they are not needed, during processing. As well as these layers, there are also interlayers between each colour layer which improve the colour rendition and a top protective supercoat.

Printing

If the printing is carried out 'in-house' there should be more control over the final product. Many problems can be solved quickly if the photographic assistant is shown the object and the final display conditions are discussed. (Refer to items in Section 1). Once the photographic assistant is familiar with the final appearance requirements, it is possible to adjust the enlarger colour balance in the yellow, magenta and cyan ranges to obtain the best colour match. Final checks are carried out by viewing the print under the same lighting conditions as the display. Unfortunately, it must be remembered that the print can never have the brilliance and colour range as the object itself, so a perfect match is not possible.

NOTE:Additional washing during the processing stage will help remove excess chemicals and improve the stability of the print. Air drying the prints will also eliminate possible contamination.

Mounting

It is important to select the best mounting board. Porous materials (plywood, chip board, customwood) allow the adhesive to progressively dry out starting around the edges and the corners. As a result, the photographic materials will lift and curl.

This problem can be minimised by sealing the edges and the corners with a coat of silicone to prevent the penetration of air. While non-porous materials, (A1 sheet, foam core) are therefore considered more permanent. Usually the mount will be required to conform to a particular 3-D shape and a more flexible material should be considered.

Case Study 1

A painted frontlet/mask with a corona of blue-green abalone shell inlay. Several shell pieces making up the corona were missing. (Kwakiutl, Vancouver Island, Canada. Aust. Mus. E21540.)
Missing shell inlays were replaced with photo inlays which were either prints alone or print/balsawood laminates. Laminates were made up of CIBACHROME prints adhered to balsawood using a PVA emulsion. The gloss of the print was reduced by lightly dry sanding with wet-dry abrasive paper 600 grit.

The lamellae of the shell was suggested in the photo-inlay by embossing along the contours with a layer of encapsulating mylar. To achieve the desired curvature, the balsawood layer was cut (slit) parallel to the grain and curved to the appropriated degree. Linen threads were inserted into these slits to retain the concave shape.

Balsawood was selected because it is easy to carve into the

final shape, produces thin sheets which are lightweight and flexible enough to bend to fit the desired position.

Sanding must be carried out with caution otherwise you will start to remove the dye layers (in order from top, the top of the print, blue, green, red). Sanding will also increase the surface area of the print, remove the protective top and hence the potential for damage/deterioration will increase.

Case Study 2

Ceremonial painted dance mask, originally with 2 pearl shell eyes, although only 1 shell remained. (East Sepik Province, Papua New Guinea, Aust. Mus. E46313.)

The missing pearl shell eye was replaced by a CIBACHROME/balsawood laminate with the gloss of print reduced by light sanding. In this case desired curvature (convex shape) was achieved by cutting small wedges out of the back of the balsawood. The balsawood was then flexed into position. The edges of the balsawood, using an ink pen were tinted to match the original shell.

SUMMARY

This technique provided excellent results for the 2 shell replicas investigated. These objects will be displayed in a gallery and the photo's stability will be monitored.

It must be noted that unless the requirements for the photo are thought through thoroughly, this technique could prove very expensive due to the production of numerous prints before the final result is obtained.

Technical Information on the Ilford Gibachrome System is available on request from Ilford Agencies.

Thanks: This procedure was introduced in the Materials Conservation Division by Ms Ann Howatt-Krahn

Sue Gatenby,
Conservator,
Materials Conservation Division,
Australian Museum, 6-8 College Street Sydney, 2000, Australia.

ICOM-CC 9th Triennial Meeting,

Dresden, German Democratic Republic,
August, 1990.
Working Group on Ethnographic Materials

SUMMARY OF PAPERS PRESENTED

"A survey of pest control techniques used at the Textile Museum from 1925-1990". Sarah Wolf Green

An historical review was presented with procedures reminiscent of any museum. Earlier treatments involved, for example, fogging with paradichlorobenzene. In the 1960's a new program was initiated which added some preventive measures such as the screening of windows and the use of dichlorvos pest strips. Incoming and outgoing material was isolated and fumigated with Dow Fume. The present program, an integrated management one, involves the use of sticky tapes to trap insects (for monitoring purposes). Dichlorvos usage has been discontinued and a method involving the freezing of material has been introduced. Investigations into the effects of the freezing process on materials is presently being investigated. Flash freezing (-30C for 24 hours), similar to the procedure used at the Victoria and Albert Museum was also discussed.

"Food irradiators as a method for sterilization for severe mold infestation on archaeological artefacts". James Roberts

A collection of mats which had a long history of mould infestation was treated: cordage supported, loose fibres were consolidated and some re-weaving. Containers were constructed with internal humidity control and a flip top lid to allow for study without handling. The container with the object inside was irradiated. It has been determined that 1.8 megarads was sufficient to kill mould spores.

"Art and a sense of place: materials, culture and meaning in the natural environment". Ann Howatt-Krahn

A visual presentation helped to describe the many associations that objects have to their original owners and fabricators. There is often a distinct relationship and symbolism involved in the materials used which has not yet been fully appreciated by many conservators. This concept was outlined with examples from native Canadian indian.

"Traditional Treatments for ethnographic objects with reference to Africa". Colette Jourdain

Many African objects (some over 2,000 years b.p.) have been well preserved and the methods used were described as an insight into this phenomenon. There are traditional fumigation treatments using leaves and plant tissues and methods for filling cracks which also have a fumigation effect. The techniques vary from region to region as do the problems. The main problems are caused by the variation in humidity, from extreme dryness to high humidity. this research is continuing.

"An investigation into the cleaning procedures for mould stained Australian Aboriginal objects painted with modern

media". Sue Gatenby

Modern media such as acrylic paints are becoming increasingly more common on painted Australian Aboriginal objects. A collection of objects was delivered to the Museum with severe mould infestation. Properties of the paint such as solubility, sensitivity and pigment type were discussed in relation to cleaning. A simple procedure using distilled water was found to be the best technique for removing the bulk of the growth. Properties outlined show why this procedure worked so well. Investigations into the removal of the black mycelium staining is continuing with an enzyme cocktail of protease, glucanase and chitinase being investigated.

"Binding media identification kit for ethnographic painted objects". Dusan Stulik

The binding media identification kit which was developed for the recent Getty Conservation Institute course was presented. This kit involves a series of tests, many based on pathology and forensic tests to identify the common types of binding media: oils, fats, protein, blood, resins and gums, honey, starch, egg and milk. A project has been initiated in collaboration with with Lesley Bone, De Young Museum, San Francisco, to co-ordinate collection of binding media samples for analysis by the GCI. The overall aim of this project is to provide a Binder Analysis Library accessible to all ethnographic conservators.

TRAINING IN THE CONSERVATION OF CULTURAL MATERIALS IN AUSTRALIA

Introduction

The Training Program in the Conservation of Cultural Materials was established in 1978 at the Canberra College of Advanced Education &now the University of Canberra) and is still the only degree granting program in conservation in Australia. Initially, an associate diploma and a master's degree program were offered through course work, offering specialisation in library, archival and ethnographic conservation. Today, the program has been redesigned to offer a greater number of specialisations through a three-year bachelor's degree. The majority of students enrol in the bachelor's degree program, while a few qualified conservators enrol in the applied research master's degree program either at the University or at the conservators' own institutions. The University is now offering a PhD by research which is available to suitably qualified and experienced conservators.

In 1981, the Program was appointed a Regional Conservation Centre (sponsored by UNESCO) with responsibility for providing a conservation service and, in South East Asia and the Pacific requiring such assistance. Since then, several students from these countries have graduated from the University's conservation program. Workshops specifically related to conservation problems in the tropics have been held at the University of Canberra for conservators from these regions and workshops have also been held in specific countries which have requested training. The majority of extracurricular training has been in archival and ethnographic conservation. In 1991, the Regional Conservation Centre anticipates funding for a survey of local conservation training needs in the Pacific.

Undergraduate Training

Admission to the bachelor's degree program in the conservation of cultural materials is highly competitive. Fifty to seventy applications are received annually while only 18 students area accepted. In addition to the usual prerequisites for entry, such as matriculation chemistry, manual dexterity, practical experience in the arts and crafts as well as in conservation, many applicants also have a first degree in the arts, sciences, or anthropology/archaeology.

The first year and a half of the program concentrates on an introduction to the history, technology, material science and conservation of major categories of cultural materials. All students must also successfully complete units in preventative conservation and materials chemistry.

The second half of the program allows the student to program in either paintings, paper, metals, textiles or objects conservation, the latter including organic and inorganic materials which comprise historical, archaeological, ethnographic and technological collections. If students elect to concentrate on objects conservation, they are required to complete second year conservation units in both organic and inorganic materials, but in their third year, they may specialise in either one or the other, or both areas. If students are particularly interested in either ethnographic or archaeological or historical or technological collection, every effort is made to supply students with objects representative of such collections. For example, it is possible for a student to only work with anthropological collections during the last 18 months of the program with the stipulation that such objects present a diversity or organic and inorganic material types. At the end of their second year, students are required to spend a minimum of six weeks working in a recognised conservation laboratory with materials related to their area of specialisation. Usually, most students elect to spend most of their vacation periods obtaining further "hands-on" experience.

The third year of the objects segment of the program also

requires a research project which involves an intensive literature search and experimental program in a relevant area which has been inadequately addressed in the current literature. Students are encouraged to publish the results of their projects since, in most cases, the calibre of their work is high. (See the list below for titles of projects related to the conservation of anthropological collections.) In this final year of their program, students also select an elective unit of their choice; those who prefer to work with ethnographic collections usually enrol in a unit entitled "Materials Anthropology" which examines the fabrication, use, social context and symbolic significance of objects primarily from Aboriginal and Torres Strait Islander material. This unit is offered by the Museum Studies/Cultural Heritage Management program which, in 1989, officially joined with Conservation of Cultural Materials to for the National Centre for Cultural Heritage Science Studies (NCCHSS).

On completion of the course, students are urged to undertake a year's internship in a professionally recognised conservation laboratory of their choice. Since the inception of the Conservation of Cultural Materials training program, however, there has never been a dearth of permanent positions for trained ethnographic conservators and consequently, graduates tended to immediately accept full time permanent employment. Now students are better recognising the benefits of advanced conservation experience, and more are looking for this type of training overseas.

Titles of completed third year student projects which relate to the conservation of anthropological collections are as follows:

Berry, Michelle (1988)
An Approach to the Conservation of Japanese Armour

Dickens, J. (1986)
The Development of a Treatment to Re-Secure Mats of Insect Damaged Fur

Drummond, G. (1986)
The Mending of Feather Vanes

Dukes, C. (1988)
Pigment Consolidation on Aboriginal Objects

Edmonds, P. (1989)
Fungi and Its Relationship with Aboriginal Painted Surfaces Containing the PVAc Emulsion Binder, Aquadhere.

Evans, R. (1988)
Preventive and Conservation Recommendations for a Melanesian Basket Collection

Gresson, J. (1987)
Mounting Systems and Materials for Barkcloth and Mats

Harley, C. (1989)
The Conservation of Wax Artefacts

Hinman, P. (1984)
The Preparation and Reactivation of Polymer Films and Reinforced Polymer Films for the Repair of Plant Fibre Materials

Head, K. (1984)
The Condition and Treatment of a Polychrome Inner Coffin of Egyptian 22nd Dynasty

Itam Osman, Z. (1990)
Effective Low-Cost Fungicides for Outdoor Wooden Objects in Malaysia

Mosby, T. (1988)
An Investigation into the Deterioration and Conservation of Shell and Shell Artefacts

McGowan-Jackson, H. (1990)
Shellac in Furniture Conservation

Scott, M. (1986)
A Search for Solvent Mixtures for the Removal of Cured Epoxy

Scott-Waine, J. (1985)
Herbs (An Answer to the Insect Problem?)

Slade, S. (1985)
The Suitability of Threads for Use in the Conservation of Basketry

Te Kanawa, R. (1990)
The Evaluation of Cleaning Muka (*Phoremium tenax*)

Tworek, B. (1985)
Restoration of the Flexibility of Degraded Monocot Leaves

Valis, S. (1990)
Investigation into the Distortion of Triodia and Xanthorrhoea Resins Used on Aboriginal Artefacts

Whiting, D. (1989)
Evaluation of Paint Removal Techniques Used on Maori Meeting Houses

Xavier, A. (1988)
Consolidation of Termite Damaged Architraves

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The ETHNOGRAPHIC CONSERVATION NEWSLETTER of the Working Group on Ethnographic Materials of the ICOM Committee for Conservation is available free of charge to those with a professional interest in the care and research of ethnological collections.

The publication date and deadline for the next issue is March 1, 1991; however ARTICLES ARE WELCOME AT ALL TIMES!

Authors are asked to submit articles in either English or French. As an option, one is also invited to send an additional copy of the same article in the language of his or her country of origin, if it is other than the two languages, above, in order to share this published work with colleagues at home. We prefer that articles, notes and letters for publication be typed and double spaced. Black and white illustrations are welcome.

PLEASE PROVIDE CHEMICAL COMPOSITION IN ADDITION TO THE BRAND NAMES OF COMMERCIAL PRODUCTS AND CONSERVATION MATERIALS, SINCE COMMON NAMES AND TRADEMARKS VARY INTERNATIONALLY.

INQUIRIES OR SUBMISSIONS FOR NEWSLETTER

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