



The  
ETHNOGRAPHIC CONSERVATION NEWSLETTER

of  
The Working Group on Ethnographic Materials  
of

*Number 2*

The ICOM Committee for Conservation

*June 1986*

FROM THE EDITOR:

Dear Colleagues,

It is with great pleasure that we can report a significant growth in subscriptions for your Newsletter - after only one issue. Clearly conservation of ethnological materials is of global interest.

Our special appreciation is extended to those Regional Co-ordinators and correspondents who have shared their work with us in this issue. We would also like to thank the Glenbow Museum, Calgary for its assistance in the past, and the Australia Museum for its continuing assistance.

To encourage maximum development in this area of conservation, we continue to offer the Newsletter free of charge to ICOM members and non-members alike. You will note that the

layout has changed, and may continue to do so, according to the availability of resources, and the costs of production and distribution.

THE CONTENT WILL REMAIN FLEXIBLE TO REFLECT THE WIDE VARIETY OF COLLECTIONS, THEIR NEEDS, AND THE INTERESTS OF OUR COLLEAGUES. UNITING THIS VARIETY IS THE PROFESSIONAL BOND SHARED BY CONTRIBUTORS AND READERS ALIKE. THEREFORE, WE ASK EACH OF YOU TO ACTIVELY CONTINUE IN THESE DISCUSSIONS THROUGH COMMENTS, QUESTIONS AND ARTICLES FOR THE NEWSLETTER. Letters to the Editor may also be re-printed in subsequent issues (unless otherwise indicated).

This issue is privileged to present contributions from North to South, East to West, in the company of those who

share an appreciation and regard for our global heritage.

Ann Howatt-Krahn  
Assistant Co-ordinator and Editor

CO-ORDINATOR'S REPORT

This will be brief as the very high level of interest and activity in ethnographic conservation around the world at this time largely speaks for itself.

The recent Ninth International Taniguchi Foundation Symposium on "Conservation of Ethnographic Objects in Museums" organized by the National Museum of Ethnology in Osaka, provided an interesting update on the different research, conservation and training approaches being used by Japan, Denmark, the United States and Australia

for the treatment of ethnographic artefacts including open air museum buildings and collections. Papers covered methods for surveying damage to collections for establishing treatment priorities, ethical and aesthetic considerations, a review of metal treatments, the effect of climate on building stone and treatments for moisture-sensitive and fragile materials.

In addition to the technical content, the Symposium provided an excellent opportunity for informal discussion amongst the members of the Working Group who were present, Tsuneyuki Morita, Ann Howatt-Krahn, Carolyn Rose and Sue Walston, on a range of conservation topics including the Group's triennial programme. Japanese hospitality is very conducive to

creative thinking, and ideas flowed well over a few bowls of sake. Proceedings of the Symposium are to be published and should be available by the end of the year. Ordering details will be provided in the next issue of the Newsletter.

The next major international focus on ethnographic conservation will be at the Canadian Conservation Institute in Ottawa in September this year who are organizing a symposium on the "Care and Preservation of Ethnological Material." I gather that preparations for the symposium are well advanced and that there has been a fine response to the call for papers. As mentioned in the last Newsletter there will be an interim meeting of the Working Group on Saturday, October 4, immediately after the CCI symposium. The purpose of the meeting is to review the current programme, encourage membership and provide a forum for new ideas on which to base the next triennial programme. The meeting is open to all interested conservators.

#### 1984-87 Programme Update

##### 1. International Ethnographic Conservation Survey

Of the 157 countries approached, 39 Regional Co-ordinators have so far been ap-

pointed who are willing to help with the work of the Group, particularly with the collection of survey data from their countries. Almost all of the countries responded, indicating considerable interest in the work of the Group and offering assistance.

A large proportion of these countries, however, do not yet have conservation facilities, thus it has not been possible to include them in this survey.

One hundred and twenty-two survey questionnaires have been returned to date which are providing valuable information on a range of projects and problems that ethnographic conservators are concerned with around the world. Help from Regional Co-ordinators in gathering this information is much appreciated. A preliminary report on the survey findings will be available for the Interim Meeting this October, and a full report by the 1987 Triennial Meeting.

##### 2. Newsletter

Established. Congratulations to the Editor!

##### 3. Definition of Ethnographic Materials

A working paper is being prepared by Prof. Barrie Reynolds of the Material Culture Unit, James Cook University of North

Queensland, on the nature of ethnographic materials for discussion at the 1986 Interim Meeting. It is hoped that this will form the basis for a further presentation at the 1987 ICOM Meeting.

##### 4. Bibliography

A bibliography of the ethnographic conservation literature is being compiled by Ruth Norton, Lecturer at the Canberra College of Advanced Education Conservation Department. A basic bibliography should be completed towards the middle of the year with references obtained mainly from AATA, ICCROM and the British Museum library listings. I am now looking for a way to get this information entered onto word processor or data base. As soon as it is available I will send copies to Assistant Coordinators and Regional Coordinators so that it can be distributed for further additions. An updated version will be available at the Interim Meeting in October.

##### Call for Papers

The 8th Triennial Meeting of the ICOM Committee for Conservation, Sydney, Australia, 6-11 September 1987: Working Group Session on Ethnographic Materials: The meeting will

be held at the Sydney Hilton International Hotel. Approximately 8 papers will be presented with time allowed for discussion. The official languages will be English and French with simultaneous translation. There will also be a poster session.

Papers are invited for the session on Ethnographic Materials which can include case studies or research reports on any aspect of conservation or preventive conservation which can contribute new information on methods or materials for the treatment of ethnographic collections.

Enquiries about contributions to the Working Group Session or Poster Session should be addressed to:

Miss Sue Walston, Co-ordinator  
ICOM-CC Working Group on Ethnographic Materials  
c/o Materials Conservation Division  
The Australian Museum  
6-8 College Street  
Sydney, N.S.W. 2000  
AUSTRALIA

General enquiries about the 1987 Meeting should be addressed to:

ICOM 87 Secretariat  
Dulcie Stretton Associates  
70 Glenmore Road  
Paddington, N.S.W. 2021  
AUSTRALIA

CONSERVATION:  
PHILOSOPHY, PLANNING  
AND PRACTICE

WHAT IS THE TRUE  
NATURE OF THE OBJECT?

Before any measures are taken concerning the preservation of any material, it is always preceded by a reason or purpose.

This purpose can be of two different kinds. It may aim at preventing damage, in order to preserve and maintain the object's actual condition and status. This is foremost reached by controlling the object's immediate environment, handling, display, storage, etc.. I consider this "preventive conservation" to be one of the conservator's foremost tasks.

The second reason for taking measures is initiated when the object shows some kind of unwanted/undesirable defect. The aim is then to try to repair/restore it to some extent. This is often done by a more active intervention concerning the object's structure and material.

This is the key-problem; to define the nature of these defects, and to decide whether any measures should be taken or not.

At the Ethnographical Museum in Stockholm we try to make a

distinction between objects having stable defects and those that show unstable defects. A broken ceramic bowl, where the damage does not lead to a further deterioration of the object's condition, is to be considered as a stable defect. An unstable defect, on the other hand, would be the active corrosion of an object leading to further deterioration, if no steps are taken to forestall the process.

This implies that priority is given to the preservation of objects with unstable defects. A stable situation can often be reached by preventive actions such as obtaining the right climatic conditions.

This, however, does not solve the problem of deciding which criteria to follow, when it comes to the treatment of objects having a stable defect. One may keep/restore the objects in/to the state they had when first arriving at the museum. As a consequence one would then also preserve the damages on those objects arriving in an imperfect state, since this might prove to be of informative value.

Apart from the preventive aspect of the work and the necessary steps taken to preserve objects with unstable defects, we aim at restoring objects

with damages which have occurred while they have been at the museum. Examples of these are the cleaning of surfaces, dealing with broken objects or damage caused by bad mountings for exhibitions.

As to surface cleaning, one faces the ethical problem of deciding whether the dirt is original or acquired at the museum. Is it at all necessary to try to differentiate the two, and is the former to be considered as "original patina?" The remaining cases deal with defects of a stable nature, which were present at the time of the acquisition. To deal with these defects is a matter of restoration/reconstruction and could be avoided since they are not indispensable for the immediate maintenance of the material. If the artefact is in storage, no such measures need to be taken. This view is related to the fact that any intervention is compounded with risks. The substances used in the preservation process can affect and alter the status of the object, that is, its composition, form, and appearance. A process which could lead to unintentional enhancing or alteration of the material, can contribute to misinterpretations in future research and analyses. Moreover, as new

3.  
methods and materials will undoubtedly be developed, this is another reason for a cautious approach.

Although one might believe that a documented intervention is, to a certain degree, reversible, one should nevertheless be extremely careful and restrictive unless it is absolutely necessary for the material's physical maintenance. The principal aim is to prevent new damages. However, if something would happen to the object, measures should not only be taken to care for the object, but also to eliminate the negative factors which caused the damage.

It is important to begin with a clear definition concerning the "true nature of the object" which we aim to preserve. Are we trying to restore it to the form it had at the time of production or at the time of acquisition, or shall we just preserve it in its actual condition - that is, as it looks today? Or is it so that the decision varies from case to case?

It would be valuable if a general recommendation on the international level could be reached on these matters. Once the aim is common, it would be meaningful to discuss "the ethics" concerning the methods. The IIC's "Code

of Ethics" might serve as a useful baseline for such a debate. It would also be advantageous to discuss an international standard concerning the above-mentioned issue including such aspects as methods for examination, diagnosis and documentation.

Furthermore, I believe that there is a need to give concrete expression to this, so that in actual practice one would be guided concerning the choice of the most appropriate means and methods.

It is obvious that in any particular case one seeks for the best solution, given the knowledge and resources at hand. However, these prerequisites vary from person to person, from museum to museum, and from country to country, hence resulting in a great variation as to means and results. This very fact, that our prerequisites, and perhaps also our aims, are so variable, is an unsatisfactory state of affairs.

Thus it is of the utmost importance that we, as soon as possible, try to combine, or group together, our existing experience (good as well as bad), so that all of us working with these complex materials and objects could benefit from this common fund of

knowledge.

This is all the more significant as the existing published information is fragmentary and hard to survey. Why not collect all the relevant information concerning these matters in an easily usable form? This source of common reference would facilitate our choice of actions.

One practical solution to this would be a system of "loose leaves," conveniently sorted and in a brief form. These would then deal with all the presently known and proven methods. It should contain information on the method as such, its areas of use, advantages, disadvantages, risks, potential reversibilities, references and so forth. Such a system of "loose leaves" is also easy to keep up to date through addition and regular reviewing. In fact it would be a reference - a system of means and methods for the conservation of ethnographica.

Correspondent:

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#### MÅLSÄTTNING MED KONSERVERING AV ETNOGRAFISKT MATERIAL

Innan åtgärder av något slag utförs på eller omkring kulturföremål så föregås detta alltid av en anledning eller syfte. Denna anledning kan vara av två slag, antingen i skadeförebyggande syfte som strävar efter att bibehålla och bevara ett föremåls befintliga kondition och status.

Detta tar sig då i uttryck främst genom åtgärder av föremålens omgivning, hanterande, utställande, förvaring, etc.. Detta är enligt min uppfattning en av konservatorns främsta uppgifter dvs "förebyggande konservering."

Den andra anledningen till åtgärd är när föremål uppvisar avvikelser i någon form vilka bedöms som oönskade och syftet är då att försöka åtgärda/återställa detta på något sätt. Oftast görs detta med ett mer aktivt ingrepp i föremålens struktur och material.

Det är här som svårigheten och själva kärnfrågan ligger, vilka avvikelser är ur konserveringssynpunkt att betraktas som behandlingsfall och vilka är det inte?

På Etnografiska museet i Stockholm försöker vi skilja på föremål med stabila och icke stabila avvikelser/skador. Med stabil skada menas

4.  
t.ex en trasig keramikskål där föremålet har en skada men att skadan inte i sig förvärrar föremålets kondition ytterligare. Icke stabila skador är t.ex aktiva korrosionsangrepp som obönhörligen bryter ned föremålet om ingen åtgärd vidtages. Med denna uppdelning prioriteras och åtgärdas naturligtvis de icke stabila skadorna som i många fall stabiliserats endast genom förebyggande åtgärder som rätt klimat.

Men vilka kriterier skall ligga till grund för syftet med åtgärder av föremål med stabila skador?

Ett sätt är att bevara/återställa föremålen till det tillstånd de befann sig när de kom till museet. Följaktligen måste syftet här även vara att bevara föremål som förvärvades med avvikelser/skador då även dessa i sig kan vara av informativt värde. Förutom det skadeförebyggande arbetet och åtgärder av föremål med icke stabila skador är således vårt huvudmål att återställa föremål som med säkerhet har konstaterade avvikelser uppkomna under tiden här vid museet.

Som exempel kan här anges ytrensning. Åtgärd av mekaniska skador, avlägsnande av tidigare utställningsmontage.

Beträffande ytrengöring uppstår etiska problem kring frågeställningen originalsmuts och museismuts. Ska man försöka separera dessa och är originalsmuts att betrakta som "ädelpatina?"

Resterande fall dvs att åtgärda föremål med avvikelser/skador som är stabila och som fanns när föremålet förvärvades betraktas som restaureringar/rekonstruktioner vilka bör undvikas då dessa ur konserveringssynpunkt är onödiga för föremålets direkt fysiska fortlevnad. Om ett föremål är i magasin så behöver inga sådana ingrepp överhuvudtaget göras.

Orsaken till denna återhållsamma inställning är att alla ingrepp innebär risker för föremålen. Vad som kan inträffa är att de i behandlingarna ingående materialen påverkar och förändrar föremålets status dvs sammansättning, form och utseende. Detta kan medföra en icke avsiktlig förändring/förändring av föremålen på ett sådant sätt att de i en framtid kan komma att feltolkas samt att det kan hämma och försvåra kommande forskning och analys av materialen. Framtiden har alltid inneburit utveckling och tillgång till förbättrade metoder vilket gör att vi idag inte kan överblicka kommande möjligheter inom

detta område.

Även om ett ingrepp är väl dokumenterad och (i viss mån) reversibel så bör man vara mycket försiktig och restriktiv såvida det inte är absolut nödvändigt för materialens fysiska fortlevnad.

Man bör i första hand sträva efter att förebygga att nya skador uppstår. Om någonting trots det skulle inträffa måste åtgärder vidtagas inte bara för föremålet utan också mot själva orsaken till skadan.

Sammanfattningsvis kan sägas att vi först måste ha målsättningen klar helst som en gemensam internationell sådan dvs hur definieras "the true nature of the object" som vi strävar efter att bevara. Är det tillståndet föremålet hade när det var nytillverkat, när det påträffades, när det kom till museet eller som det ser ut idag. Kan det variera från fall till fall.

Först därefter är det meningsfullt att diskutera etik kring behandlingsgången med denna målsättning som en absolut nödvändig förutsättning.

Här kunde IIC's "Code of Ethics" vara en god grund för diskussion. Även här skulle det vara en fördel om vi kunde enas om en internationell rekommendation inkluderande rutiner för tillvägagångssätt

med undersökning, diagnostik och dokumentation.

Som ett komplement till detta finns anser jag ett behov av att konkretisera detta på ett sätt som gör det enklare att i praktiken få stöd och vägledning till val av rätt metod/åtgärd. Man försöker självklart att i alla situationer göra så gott man kan utifrån den kunskap och de resurser man förfogar över. Detta måste rimligtvis variera från person till person, från museum till museum och från land till land vilket gör att insatser och resultat rimligtvis också måste uppvisa stora variationer. Detta faktum att vi har så olika förutsättningar och kanske även målsättning med vårt arbete är otillfredställande. Det är därför av största vikt att vi så snart som möjligt försöker sammanställa och dela med oss av våra erfarenheter bra som dåliga i ett försök att öka kunskapen för oss alla som arbetar med detta mycket komplexa föremålsslaget. Ett stort praktiskt problem som jag upplever är att all den publicerade information som existerar är så splittrad och svåröverskådlig. Skulle man inte kunna samla den relevanta informationen och erfarenheterna på ett för vårt vidkommande mer anpassat

sätt?

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Detta skulle kunna fungera som ett gemensamt beslutsunderlag och utgångspunkt för val av behandling/åtgärd.

Jag hade då tänkt en uppbyggnad av ett lösbladssystem upplagt efter ett lämpligt register. Ett sådant system skulle vara av typen faktablad och ge en kortfattad metodbeskrivning, användningsområde, fördelar, nackdelar, risker, reversibilitet, referenser, litteraturhänvisning, etc. för samtliga idag kända och beprövade metoder.

Ett lösbladssystem skulle också enkelt kunna kompletteras och revideras med lämpliga intervaller.

En metod - och åtgärdssammansättning (referenssystem) för konservering av etnografiskt material.

Stockholm 1986-04-30

Lars-Erik Barkman  
Etnografiska museet  
115 27 Stockholm

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#### PROJECTS IN PROGRESS

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MUSEUM OF ETHNOLOGY,  
VIENNA (AUSTRIA):  
Restoration  
(Conservation)  
Activities

At the end of 1985 two of the greater restoration projects, mentioned in the last Newsletter (No. 1, June, 1985) could

be finished. Now the following details of these works can be given:

a) Concerning the restoration of the ceremonial shield from the Solomon Islands.

The need for restoration arose as a result of the heavy damage which had occurred in the recent years, mostly to the bottom of the shield, as a total of 12.5% of the chips of Mother-of-Pearl inlays fell off. In order to conserve the object, it was therefore most important to secure the application. A stabilizing emulsion consisting of methyl cellulose, Planatol Sup., rabbit glue, ethanol, Nekal BX-solution and Nipagin was injected under the loose chips and into the small cracks in the dried out parinarium nut glue-paste.

Concerning the restoration of missing chips of Mother-of-Pearl, 262 new pieces formed from Nautilus shell, as well as 77 original chips which had fallen off but remained whole, were glued onto the damaged areas by means of Elastosil A-33 ivory, a silicon rubber free of acetic acid. Afterwards all the restored areas were sanded even in the same manner as the original ones.

In order to fill out the many small cavities in the ground mass of the parinarium nut

glue, located along the edges of the restored chips where the material had cracked off, Planatol BB Superior (a polyvinyl acetate dispersion) mixed together with pigments was used. Both the silicon rubber and the Planatol paste fulfill elasticity requirements. The Nautilus Mother-of-Pearl additions were lightly tinted with a potassium permanganate solution.

A correspondingly dark pigment mixture was rubbed into the spaces between the restored chips and then treated with hydroxypropyl-cellulose, KLU-CEL HF, dissolved in Isopropanol. This restoration work was carried out by Mr. Florian Rainer in co-operation with the Academy of Fine Arts in Vienna.

b) Restoration of a Hawaiian Barkcloth (Tapa) from the collection of James Cook.

The object consists of four parts sewed together and is decorated with a red geometrical stripe ornament.

The tapa was dusty and damaged by tears, smaller and larger holes, creases and black or orange rust stains.

Some parts of the barkcloth were overstrained and other ones were especially dirty.

First the rust stains were removed to some extent with di-

luted oxalic acid (2.5%). Oxalic acid had the best effect, unlike other agents. After testing the colours for fastness, the tapa was washed gently at room temperature. The washing solution consisted of distilled water, 0.04 % Tinovetin JU and 0.005 % Carboxymethylcellulose.

The tapa was then rinsed two times with tapwater, one time with distilled water containing calcium hydroxide and, finally, rinsed shortly with distilled water only.

While still wet the object was smoothed and the fibres around the holes and tears were laid in order.

Blotting paper was used to drain off surplus water and the tapa was left drying until the next day.

As material for the repairs, remnants of barkcloth from the museum, slightly coloured Japanese paper and methylcellulose MC 40 (buffered with magnesium bicarbonate) were used.

The re-touching was carried out with watercolours which were mixed with chalk dust to avoid disturbing brightness.

This work was carried out by Mrs. Roswitha Zobl in co-operation with the Academy of Fine Arts in Vienna.

ETHNOGRAPHIC NETWORK -  
INQUIRIES

6.

Attention:

We need information on analyses of red colours used for colouring tapas in Hawaii. Who is in a position to carry out such analyses? Please write to Dr. W. P. Bauer, Museum for Ethnology, A-1014 Vienna, Austria.

Restoration of a metallic Buddha-sculpture from China (dated 1682 A.D.).

The Sculpture (height 1.08 m., diameter of the socle 0.88 m.) has undergone a restoration, because the socle was corroded. Green efflorescences of copper salts covered parts of the ornaments and especially the inscription applied to the socle. The inscription, engraved in three languages (Tibetan, Mongolian, Chinese) thereby became illegible. At the beginning of the restoration treatment, chemical analyses, as well as cross-sections, were carried out to determine the alloy of the sculpture and the metallic structure. The alloy consists of 75.5 % Cu, 20.9 % Zn, 2.5 % Pb, 0.9 % Sn (Brass). A cross-section shows that the sculpture is amalgam-gilded. The corrosion is limited only to the surface area.

In order to expose the inscription as well as to re-

move the corrosive layer from the seale, an ultrasonic treatment (with cavitation apparatus) and chemical treatment were combined. The following chemical solutions were used: Komplexon III/ ammoniac pH 10; a solution of Sodium hydroxide, Sodium-potassium, tartaric acid, hydrogen peroxide; and a solution of Calgon mixed with methylcellulose.

After this treatment a protective film was applied in order to conserve the sculpture. A mixture of a microcrystalline wax, toluene, acetone and benzotriazole was used (tested at the Canadian Conservation Institute, Ottawa, 1980). This mixture was diluted a little bit with Petroleum benzine in order to improve its brushability (spreading quality).

Dr. Wilhelm P. Bauer  
Museum of Ethnology, Vienna  
Neue Hofburg  
A-1014 Vienna, Austria

#### RESTAURIERUNGSARBEITEN IM MUSEUM FÜR VÖLKERKUNDE WIEN (Österreich)

Ende 1985 konnten zwei größere Projekte, die bereits im letzten Newsletter erwähnt worden waren, abgeschlossen werden. Nun kann ein detaillierter Bericht darüber gegeben werden.

#### a) Die Restaurierung eines Zeremonialschildes von den Salomon-Inseln (Stiq. Novara, 1858).

Der elliptisch geformte Schildkörper (84 cm hoch, 28 cm breit) besteht aus einem spiralförmig aufgebauten Rotang-Flechtwerk. Die Schauseite zeigt eine symmetrische Perlmutterverzierung (Nautilus pompilius), die in einer aus Nüssen gewonnenen Masse (parinarium hahlii. Warb.) eingelegt ist, die mit Holzkohle schwarz pigmentiert wurde. Stellenweise trägt sie eine rote Übermalung mit eisenhaltiger Erdfarbe (Ocker). Es existieren nur ca. 20 solcher Objekte auf der Welt. Anlaß für die Restaurierung waren schwere Schäden, die im Verlauf der Jahre an der Kittmasse entstanden und einen Abfall von 12,5 % der Perlmutterplättchen bewirkten.

In der ersten Restaurierungsphase wurden mittels einer Stabilisierungsemulsion die noch vorhandenen Intarsien gefestigt. Die Emulsion bestand aus Methylcellulose, Planatol Sup., Kaninchenleim, Äthanol, Nekal BX-Lösung und Nipagin. Diese Lösung erwies sich nach Tests am geeignetsten zur Festigung: bei geringer Viskosität und hoher Benetzbarkeit wies sie gleichzeitig eine hohe Klebkraft

auf. Die Lösung wurde unter die losen Perlmutterplättchen und in die schmalen Risse der ausgetrockneten Parinariumkittmasse injiziert.

Aus Nautilus pompilius-Exemplaren wurden für die fehlenden Perlmutterplättchen 262 Stück nachgeformt und mitsamt 77 Plättchen, die abgefallen aber als ganzes noch erhalten waren, mittels Elastosil A-11 (Elfenbein), eines essigsäurefreien Silikonkautschuks, wieder angeklebt. Nach dem Verkleben aller neuer Ergänzungen wurden diese in Angleichung an die originalen Plättchen leicht überschleift.

Zur Ausfüllung schmaler Risse und Ausbrüche in der Parinarium-Kittmasse, vor allem an den Ecken der restaurierten Plättchen, wurde eine Mischung von Planatol BB sup. (eine Polyvinylacetat-Dispersion) mit Erdpigmenten verwendet. Sowohl Silikonkautschuk als auch die Planatolergänzungsmasse erfüllen die Bedingung guter Elastizität. Abschließend wurden die neuangefertigten Perlmutterergänzungen mit Kaliumpermanganatlösung leicht bräunlich getönt.

In die Zwischenräume der restaurierten Perlmutterplättchen wurde ein gemischter dunkler Pigmentstaub eingerieben und mit Klucel HF (einer Hydro-

xypropyl-Cellulose, gelöst in Inopropanol) gebunden. Die Restaurierung wurde in Zusammenarbeit mit der Akademie der Bildenden Künste in Wien von Herrn Florian Rainer durchgeführt.

#### b) Restaurierung eines Rinden- baststoffes (tapa) aus Hawaii (Stiq. James Cook, 1780).

Das Objekt besteht aus vier zusammengefügten Teilen und ist mit einem roten geometrischen Streifenmuster verziert.

Der Tapastoff ist durch die Lagerung staubig und durch Risse, kleinere und größere Löcher, Falten und durch schwarze und orangefarbene Rostflecken beschädigt.

Teile des Rindenbaststoffes sind stark überdehnt, andere besonders schwärzlich verschmutzt.

Zuerst wurden die Rostflecken weitestmöglich entfernt. Nach Testen erwies sich dafür eine verdünnte Oxalsäure (2,5 %) am geeignetsten. Zur Reinigung des Tapastoffes wurde ein milder Waschprozeß bei Raumtemperatur vorgenommen. Zuerst wurden jedoch die Farben in ausgedehnten Versuchen auf ihre Waschfestigkeit geprüft. Als Waschlösung diente destilliertes Wasser mit Zusatz von Tinovetin JU (0,04 %), einem nicht-jonogenen Waschmittel der Fa.

Ciba-Geigy, und 0.005 % Carboxymethylcellulose.

Der Tapastoff wurde danach zweimal mit Leitungswasser geschwemmt, dann einmal mit kalziumhydroxid-haltigem destilliertem Wasser und zuletzt kurz nur mit destilliertem Wasser.

Noch feucht wurde das Objekt geglättet und die abstehenden Fasern um Risse und Löcher mit einer Pinzette vorsichtig ausgerichtet. Überschüssiges Wasser wurde mit Löschpapier (säurefreies Papier) abgetrocknet und der Tapastoff sodann über Nacht und den darauffolgenden Tag trocken gelassen.

Zum Schließen der Fehlstellen wurden Rindenstoffreste, die im Museum vorhanden waren, und mit Tee leicht getöntes Japanpapier, als Kleber Methylcellulose MC 40 (mit Magnesiumbikarbonat gepuffert) verwendet. Die Retusche wurde mit Wasserfarben durchgeführt, die jedoch mit entsprechend gefärbtem Kreidestaub vermengt worden waren, um einen störenden Glanz zu vermeiden.

Die Restaurierung wurde in Zusammenarbeit mit der Akademie der Bildenden Künste in Wien von Frau Roswitha Zobl durchgeführt.

#### Achtung:

Wer hat Erfahrung mit Analy-

sen roter Naturfarbstoffe, wie sie zur Färbung von Tapas in Hawaii früher verwendet wurden? Wer könnte solche Analysen durchführen? Bitte, schreiben Sie an: Dr. Wilhelm Bauer, Museum für Völkerkunde, Neue Hofburg, A-1014, Wien, Österreich.

#### Restaurierung einer metallenen Buddhastatue aus China (datiert 1682 n. Chr.).

Die Statue (Höhe 1.08 m, Größter Sockeldurchmesser 0.88 m) mußte restauriert werden, da am Sockel stärkere Korrosionserscheinungen auftraten. Sie bedeckten Teile der reichen Ornamentik, besonders aber wurde eine Inschrift am unteren Rand des Sockels völlig verdeckt. Die Inschrift in chinesischer, tibetischer und mongolischer Sprache wurde dadurch völlig unleserlich.

Vor der Restaurierung wurden chemische Analysen und Querschliffuntersuchungen durchgeführt. Sie ergaben, daß die Statue aus einer Messinglegierung besteht (75.5 % Cu, 20.9 % Zn, 2.5 % Pb, 0.9 % Sn) und feuervergoldet ist. Die vorhandenen grünlich ausblühenden Korrosionsbeläge sind zum größten Teil jedoch nur auf die Oberflächenbereiche beschränkt.

Zur Freilegung der Inschrift und Entfernung der Korrosionsschichten am Sockel wurden eine

Ultraschallbehandlung mit Cavitron-Apparatur und eine chemische Behandlung kombiniert. Zur Entfernung der Korrosionsschichten wurden folgende Lösungen verwendet: Komplexon III mit Ammoniaklösung auf pH 10 eingestellt, ferner eine Lösung von Natriumhydroxid, Kalium-Natriumtartrat und Wasserstoffsuperoxid in destilliertem Wasser und eine mit Methylcellulose gemischte Calgonlösung. Durch diese Behandlung gelang es, die Inschrift freizulegen und wieder gut lesbar zu machen und auch die anderen Korrosionen zu entfernen.

Abschließend wurde die Statue zum Schutz mit einem mikrokristallinen Wachs, gelöst in Toluol, Azeton mit einer Beimengung von Benzotriazol, überzogen (diese Mischung wurde vom CCI - Ottawa, 1980, entwickelt). Um die Strichbarkeit dieses Gemisches zu erhöhen, wurde es mit etwas Petroleum-Benzin verdünnt.

Dr. Wilhelm F. Bauer  
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#### THE MATERIALS CONSERVATION DIVISION OF THE AUSTRALIAN MUSEUM: Current Projects

1) A computer-controlled environmental chamber has been in-

stalled in Materials Conservation. It is designed to accurately maintain a wide range of relative humidities and temperatures. The equipment is currently being evaluated and minor improvements made. The chamber is already proving useful for a range of treatments where it is necessary to manipulate the water content of moisture-sensitive materials.

Humidification for the reshaping of badly creased and deformed woven baskets from the Pacific is progressing well. The equipment is enabling accurate control of the moisture content of the baskets, minimizing potential mould growth, water staining, and dramatic changes in relative humidity during treatment.

A valuable use for the equipment will be the slow automatic lowering of the moisture content of artefacts which have been accidentally exposed to very high relative humidities, through flood damage, for example.

Because of its mode of operation, the RH control system in the chamber does not require calibration or maintenance. The RH is, however, always accurately recorded and controlled over time. A full report



on its use will be presented after evaluation. Anyone interested in the unit should contact David Horton-James in Materials Conservation.

2) Flake Adhesion Project - A Project is being undertaken to determine suitable methods and materials for the treatment of loosely bound, matt and flaking pigments on ethnographic artefacts from the Oceanic region. Research is concentrating on the use of water-soluble resins to be used beneath the paint layer for the adhesion of pigment flakes rather than for surface consolidation.

- The project is being carried out in three stages:
- Stage 1 - Develop treatment techniques
- Stage 2 - Establish testing procedures (chemical and physical tests to determine ageing, appearance and working properties)
- Stage 3 - Determine final selection criteria, select and test resins

It is anticipated that this project will take approximately three years to complete. Stage 1 has been completed and Stage 2 is well underway with a number of physical testing procedures currently under trial. It is unlikely that this project will be completed by the 1987 Triennial Meeting although an update

will be provided if opportunity allows.

3) A semi-permanent gallery is being prepared with the title "Cultural Diversity." It will contain exhibits of cultural material from populations throughout the world. Approximately 300 artefacts will be displayed, in particular, textiles and other ethnographic material from the Pacific and South-East Asia, as well as objects that are folk art in nature from other areas of the world. It is anticipated that the Gallery will open late in 1988.

4) The Materials Conservation Laboratory is currently working on a large number of artefacts from the Pacific that are to be included in a new temporary gallery for 1988. The objects range in nature from large canoes and house posts; to masks and baskets of woven fibre, mud, feathers and shell; and other paraphernalia from the region amounting to about 600 artefacts.

The immediate problem is the cleaning of 15 chalk figures from New Ireland, Papua, New Guinea. Most of the surface areas are unpigmented, however, many of the face and chest areas are painted with red, yellow and dark brown pigments. Apart from the very soft and

friable nature of the chalk, the figures are physically stable. They have, however, been badly stained by mould and deeply ingrained museum dirt.

In 1978, during a mould outbreak in the collection, the objects were sprayed with the fungicide Topane w.s. (2 hydroxy bi-phenyl-sodium salt), as a 2% solution in ethyl alcohol. The surface dirt at that time was drawn into the chalk, becoming ingrained thus exacerbating the problem of its removal.

Only a short lead time to test cleaning procedures was allowed. Initially the objects were brush/vacuumed to remove loose surface dirt. Two variations on the use of one cleaning solution were devised to treat the objects.

We are finding that with the completely unpainted figures, a poultice system using a thin layer of pulped Japanese paper in 20% ammonium solution covered with the same solution in a Sepiolite pack (hydrated magnesium silicate) to 1 cm in depth, will release both ingrained dirt and mould after it has been in situ for up to twenty hours.

During removal of the poultice the object is gently swabbed with the ammonia solution. We have found a soft bristle brush

will assist in the release of dirt from the crevices. Some bleaching of the mould may be occurring, however, most is being removed in solution leaving a clean white chalk figure.

The problem we have with this technique is that upon drying the thinner limb areas show an as yet unidentified bright yellow stain removable with water. It may be possible that the staining is a result of the earlier Topane application.

The main problem occurs with the cleaning of the painted objects. Many of the pigments are fugitive in the cleaning solution and thus poulticing is out of the question. Localized poulticing brings out the yellow staining as well as creating water marks. Cleaning is proceeding very slowly by swabbing the solution over the chalk in a gentle rolling motion. The result is a clearer appearance although not to the degree of the poulticed objects. Each painted object is taking two weeks to complete, compared with the two days for the poulticed pieces.

Conclusion

Although the treatment results are a vast improvement on the uncleaned objects I am not convinced that these methods are definitive. The time-consuming nature of the second

method described may mean fewer objects of this type will be available for display. Time constraints have precluded extensive analysis of the treatment. All swabs, however, have been kept for future analysis of dirt, mould and yellow staining. We are currently trying to acquire Topane samples as well.

A full report with the test solutions and cleaning methods will be published as a further technical note when analysis has been completed.

I am confident that the treatment has not damaged the artefacts in any way. I would however appreciate some constructive criticism, particularly any thoughts on the subject of the possible effects of the Topane. Please direct any correspondence to Karen Coote in Materials Conservation.

#### Note

In view of the huge quantity of conservation work required for the two galleries, the museum will be looking to appoint additional conservators on a temporary basis until March 1988. Interested conservators should write to Sue Walston for further information.

Correspondent:

Karen Coote, Conservator  
Materials Conservation Division  
The Australian Museum  
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SYDNEY, N.S.W. 2000  
AUSTRALIA

## REGIONAL CO-ORDINATOR'S REPORT FROM BANGLADESH

Bangladesh is rich in its ethnographic heritage. There are many ethnic groups: aborigines and tribes are still around in the plains and hilly regions of the country. They are mainly Santal, Oraon, Garo, Chakma, Mug, Murong, Jyntia, Khasiya and Monipuri. In the course of time, some other ethnic groups became integrated with the mainstream of Bangalee culture. The existing aborigines are from Dravidian, Mongoloid and Indo-Aryan races. The Oraon and Santals are pure Dravidians and Hinduised aborigines; they are the earliest inhabitants of India. Chakmas are Indo-Aryans, but their physical features are changed because of their intermarriage with the Mugs, Khasuyas, Jyntias, and Lusias, who all are of Mongoloid stock and they originally came from the north of the Himalayan range.

The tribal people have an eventful history and colourful cultural life. Handloomed textiles woven by the tribal women are outstanding for design and artistry. Traditional equipment is being used for spinning yarn, and dyeing is done with vegetable dyes. Beautifully designed ornaments

made of silver, brass, iron, wood and shells are worn by the tribal women. Totem symbols such as sun, moon and animal figures adorn ornaments.

Basketry is also a flourishing craft among the ethnic groups. Baskets and other containers for storing food grains are made out of straw, bamboo and cane of varied shapes and designs.

The indigenous appliances for grinding, sieving, weighing, and winnowing cereals is interesting. The smoking pipes, carved wooden boxes and other artefacts made of skull and animal skins are remarkable. Fishing and hunting gears are skillfully made. Painted pottery and other household utensils such as bowls, bottles and different types of pots made from gourd rind are all in good taste and mirror their culture. Various types of musical instruments, for example, flutes made of bamboo, and a wide range of stringed and percussion instruments are popular among the aborigines. Sola or sponge wood is also a medium for making traditional crafts such as masks, hats and other decorative objects. The use of lacquer in the preparation of artefacts is also in evidence. However all the materials related to their everyday life reflect the specific

features of the culture of these ethnic groups. Chinese, Burmese and Indian influences are present in the primitive arts and crafts of Bangladesh.

The Bangladesh National Museum, Ethnographic Museum, Folk Art Museum and the Tribal Cultural Institute collect and preserve ethnological materials. The conservation laboratory of Bangladesh National Museum is responsible for its own ethnographic collection, while the Archaeological Laboratory treats the ethnographic objects belonging to the Ethnographic Museum. The other two institutions have no facilities for conservation. In fact ethnographic Conservation as such has yet to find a foothold in Bangladesh. In the past there was lack of interest in the collection of ethnographic objects and no expedition was ever sent by any institution for the collection of ethnographic objects. But now there is an urge to study the scientific and cultural aspects of mankind and it has diffused enthusiasm among the historians and social scientists of our country to collect and preserve the indigenous art and artefacts relating to the culture of man, both of the past and of the present.

The present state of the col-

lection of ethnographic materials in Bangladesh National Museum is satisfactory. The collection of wooden artefacts, traditional pottery, ornaments lamps, embroidered cotton quilts, musical instruments and other decorative objects is worth mentioning. In the year 1983 the Museum had shifted to its new abode and there are provisions for new galleries on the cultural life of the aborigines and tribes. It will also include the traditional art and crafts of Bangladesh. The collection of traditional boats is in progress for the boat gallery. Within two years the new galleries will be opened to the public for exhibition.

Till now we have limited scope for the Conservation of Ethnographic materials; we hope that in the near future these ethnographic materials will force upon the conservation scientists the necessity of conserving them.

The varieties of collections in ethnographic materials and their complex composition in structures is a challenge for the conservator in treating them. Also the hot and humid climatic condition of Bangladesh poses a great threat to the ethnographic materials. The growth of fungi and in-

sects does immense harm to this type of material. Improved dust-proof, and insect-free storage areas, display showcases and proper designing of the shelves, storage boxes and containers is essential for their protection.

The treatment procedure of the objects made of gourd shell, sola or sponge wood, bamboo, coconut shell and different fibres and leaves will have to be devised for their proper conservation. Projects can be initiated in the Bangladesh National Museum Conservation Laboratory to find out suitable methods for treatments of the above materials.

We are sure that, under the guidance of the Working Group on Ethnographic Materials of the ICOM Committee for Conservation, and through the international correspondents, it will be possible to develop the ethnographic Conservation field in Bangladesh.

Correspondent:

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BANGLADESH

## RESEARCH ON ETHNOGRAPHIC MATERIALS OF THE NATIONAL MUSEUM PHILIPPINES

A great number of museums in the Philippines are devoted to the collection of ethnographic objects which needs proper care among conservators and chemists. At the end of the year 1985, ethnographic collections of the National Museum totalled 223,732 pieces varying from baskets, textiles, weapons, and various ethnographic ornaments to include the latest collections which are the mummies of Kabayan.

### On-going Projects

1) Chemical characterization of ethnographic fabrics: A qualitative analysis was performed to confirm the presence of mordanting metals. Dyeing variations were conducted to understand the inner workings of the dyeing techniques used by early Filipinos. UVVIS spectrophotometry and thin layer chromatography were likewise performed. Further studies were done to identify some other colour variations and the sources of dyes. The project covers textile specimens from 110 ethnic groups of the country.

A technical manual on the analysis of ethnographic fabrics is being finalized for publication.

### 2) Conservation of Mummies:

Philippine mummies numbering thirty (30) intact pieces, dated probably 300 years old, are being investigated and their preservation methods have to be established. Research on the mummification process was studied and freeze-drying preservation is being considered unless another method is acceptable.

3) Comparative study of wood preservatives: Oil-based and water-borne wood preservatives were being studied. The solubility and effectiveness of pentachlorophenol in heavy and lighter petroleum solvent was tested. Likewise, acid copper chromate and chromated copper arsenate were used as active chemicals for water-borne preservatives. Its effects were not recommended for use on marine and salt-water wood.

4) Other projects under investigation: a) The use of glass fibre with polyester resins for restoration of bronze objects; b) Comparative study of natural fibres; and c) Storage design for ethnographic fabrics.

Correspondent:

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Chemistry & Conservation  
Laboratory-In-Charge  
National Museum  
Manila  
PHILIPPINES

## THE BRITISH MUSEUM'S ETHNOGRAPHIC CONSER- VATION ACTIVITIES: A Profile

The Conservation Department of the British Museum is divided into six materials-orientated sections. These are Ceramics, Glass and Mosaics; Eastern Pictorial Art; Metals; Organics; Stone and Wall Paintings; Western Pictorial Art and there are two additional Sections, namely the Facsimile Service and the Conservation Research Section.

The Section most concerned with the conservation of ethnographic material is Organics and one conservator from each of the other sections liaises with this laboratory in treatments involving inorganic ethnographic material.

The Organics Section's activities are concerned with the conservation, restoration and repair of organic artefacts (excluding prints, drawings, papyrus and Oriental hangings) from all the historical periods and cultures covered by the Museum's collections.

The raw materials include wood (some with painted surfaces), textiles and costume, leather, bone, ivory, shell, jet, shale, amber, feathers, basketry, bark and bark cloth, grasses, lacquer, papier-mâché. The densi-

ty of these materials and their vulnerability to physical damage and biological decay processes as well as their mutual incompatibility in some cases where they are used together, present many problems.

The Organic Section's principal laboratory is at Franks House, Orsman Road, London N1. It is next door to the British Museum's Ethnographic Store, which provides the major proportion of the Section's work. The laboratory became operational in 1979 and is modern, spacious and well-equipped. The Section also has a small workshop at the Museum of Mankind (the Ethnographic Departments' exhibition area in Burlington Gardens), which is used when exhibitions are being mounted or when conservation work is required on any of the objects on display. A specially designed laboratory is also planned for the Bloomsbury site specifically to deal with large fragile objects, normally exhibited or stored there and which cannot be transported safely to Franks House.

Because of the diversity of material the Section has to deal with, the conservators are divided for convenience into two sub-sections each treating a related group of materials.

### The Wood Sub-Section

The conservation techniques employed are the cleaning, repair and consolidation of wood, ivory, bone, shell, leather, bark, and waterlogged materials. Problems arise when cleaning painted surfaces, particularly when pigments are powdery and loosely adhering to the surface. Accordingly, several cleaning techniques are employed, such as the use of a soft brush in conjunction with a vacuum cleaner, a jet of compressed air or an airbrasive depending upon the requirement of each object. The consolidation methods range from fine spraying for surface consolidation to vacuum impregnation to strengthen the body of an object.

The sub-section also treats waterlogged material (wood and leather). The objects are first cleaned with soft brushes. If the object is wood, it is immersed in a polyethylene glycol solution (grade 400), if it is leather, it is immersed in glycerol. The objects are frozen and then freeze-dried in a special chamber connected to a condenser and a vacuum pump.

### Textile and Fibrous Material Sub-Section

The materials dealt with in this sub-section are basketry, bark cloth, feathers, grasses

and leather, spun threads, non-woven fabrics, textiles, beadwork and embroidery. Conservation treatments involve cleaning, repair, mounting and consolidation. The cleaning of coloured fabrics can be difficult due to the fugitive nature of some dyes, accordingly several cleaning techniques are used and include aqueous and non-aqueous processes. Repair can be made by sewing techniques or the use of heat-seal methods, the latter needing special adhesives and tacking irons. Many of the materials dealt with in this sub-section require specialized mounts and these are designed and constructed to the particular requirements of each object. Consolidation of fragile objects is also undertaken and the techniques used are similar to those mentioned earlier. There are eleven members of staff in the Organics Section. Areas of special interest at present are: treatment of leather-work; storage of the textiles/costume collections; treatment of beadwork with special reference to friable glass beads; freeze-drying treatments for newly collected materials and treatment of ethnographic "leather."

List of research projects carried out by members of staff

for the Museums Association Certificate in Ethnographic Conservation: Turtleshell Masks from the Torres Straits; Three African Feather Headdresses; Eskimo Model Boats; African Beaded Headdresses; Three Islamic Saddles. Copies are on file in the departmental library.

Current and Pending Major Exhibitions at the Museum of Mankind in which the Organics Section has been involved:

"Tropical Rain Forests" - South American Indian Material  
"Bolivian Masks" - Recent Collection  
"Madagascar" - Collections from Recent Museum Expeditions

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## CONSERVATION PRODUCTS

### TO RESTORE WITH SOMETHING SIMILAR (A New Look at Papers for Ethnographic Conservation) - PART II

After a second field trip to Nepal and Thailand in October, 1985, I would like to bring further information on my study

of handmade paper production in the Far East. After my first trip I had kept in touch with the Nepalese paper maker, Prem Bahadur Lama. He invited me to return and visit his workshop, situated near Goulche, a little village in the northeastern part of Nepal, just south of the Himalaya ridge and only a few miles from the Chinese border to Tibet.

While marching one-and-one-half days in steep mountains he told me about his cultivation of Daphne bholua trees. He is the owner of wide mountain areas at an altitude of 8,000 feet between the town, Chatara and Goulche, where he raises Lockta trees (the Nepalese name for Daphne bholua and Daphne papyracea, both used for paper production in Nepal). Especially the northern side of the mountains is preferred for Lockta cultivation while other areas are forested with pine trees. It is of great importance that new trees are planted in order to stop and avoid the serious erosions caused by previous woodcutting in the high mountains.

The workshop has only existed for fifteen years and Prem Bahadur is the first paper maker in his family. He was born in Goulche, where I visi-

ted his parents' house for a couple of days. Learning about daily life in the remote village was a great experience, so unlike what I have ever seen or known before. The workshop itself with its long rows of moulds, the fireplace and the flat pounding stone, was located on the Bolephi Kholo river-bank in the valley, deep below the village exposed to lots of sun and wind.

The barkstrips for the paper production are collected in springtime and the white, inner bast layer and the outer, dark bark layer of the freshly cut strips are separated immediately. The inner layer yields the best quality of paper and the bark layer with its lignified connective tissue is left behind. The dried bast is collected in bundles which are soaked in water overnight and the following morning every strip is carefully examined. Dark spots and other remnants of the outer layer are cut away or scraped off with a knife.

Following this is an alkaline treatment in a lye of ashes, prepared in a very simple way. A porous basket is filled with white ashes from the fireplace and water is added. The water soaks through the ashes into a bucket on the ground below, and this solution of water and

salts dissolved from the ashes is mixed with water in a big cooking vessel on the fireplace. The boiling must last from six to nine hours in order to ensure a complete breakdown of the fibre bonds. A shorter treatment will result in an inferior quality of paper because less impurities, juices, wax and lignified tissues are removed from the bast.

The boiled, soft bast is rinsed for a very short period in water before being pounded with wooden mallets. A longer lasting washing might remove the natural content of a glutinous substance. After the finishing drying in the mould, this substance results in or produces a less porous paper, ready for writing and printing.

In my first article "To restore with something similar" (The Ethnographic Conservation Newsletter, No. 1, June 1985), I briefly described the floating mould process.

Now I would like to discuss another paper-making workshop in the neighbourhood of the village Charikot, southeast of Goulche, because I found here another reason for not removing the glutinous substance by an overly extended rinsing in water. Here paper is produced in a different way equal to the later

Chinese and Japanese technique. After dipping the mould in a vat filled with pulp, the loose flexible bottom of woven bamboo or grass is lifted out and turned upside down. The thin layer of filtered fibres is couched on a post (stack?) of newly-formed sheets and the bamboo mat is placed in the mould again, ready for the next forming. No interleaving felts between the wet sheets of paper are necessary, because the natural glue results in a strong alignment between the fibres within each sheet which is stronger than the alignment (or bond) between the wet sheets.

In Japan a vegetable mucilage named Tororoaoi is added to the pulp in order to obtain similar effects - that is, to slow down the drainage, to control the fibres during the sheet-forming and to make it possible to deposit hundreds of wet sheets of paper in a stack without the need for interleaving felts.

It is interesting to notice the difference between the Daphne plants from Nepal and the Mitsu-mata plants from Japan, both of which belong to the Thymelaeaceae family. In Japan tororo-aoi mucilage from the roots of hibiscus varieties is added to the pulp, but in Nepal a mucilage exists in the plants themselves.

I find the long flexible Daphne fibres very interesting. An experiment has been made with these fibres in a Danish leaf-casting machine (Per Laurson, The Royal Library, Copenhagen). A paper quality with a more neutral structure than the characteristic Nepalese structure of the Daphne fibres might be useful as restoration material for both Oriental and European papers.

It is difficult to obtain a non-bleached, Japanese paper quality, free of lignin; and the bleached, lignin-free paper qualities are often too white and need dyeing in order to harmonize and blend with older, original paper items. Both lignin and bleaching agents have a harmful effect, and it would be interesting to examine how much the durability of paper is affected by these ingredients. A comparison between non-bleached, Nepalese paper, free of lignin and bleached as well as non-bleached, lignified Japanese paper might give an explanation to this question.

Japanese handmade paper has been used for paper restoration in the eastern as well as the western world because of its strength and unusual degree of perfection. Many of the paper qualities are still

produced in the original way in small villages, but paper of inferior quality is also produced. It is difficult to make sure that one is getting the best quality of paper when ordering. On the long way from the paper maker through the dealer and importer to the customer, misunderstandings occur easily.

Japanese paper restorers know where to find the best qualities of paper. Paper restorers in other countries might benefit from this knowledge if an association of Japanese paper restorers would prepare a special list of recommended, selected paper qualities available for their foreign colleagues.

Anna-Grethe Rischel  
Paper Conservation Workshop  
The Conservation Section  
The National Museum of  
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DENMARK

Editor's Note: We would like to thank Anna-Grethe Rischel for her generosity in continuing to share her valuable experiences in field research with the Newsletter. In addition to her on-going work in this area, she recently presented three posters describing new restoration materials from Nepal and Thailand at the 10th Anniversary Conference,

14.  
"New Directions in Paper Conservation" in Oxford, England, April, 1986. She also informs us that G.P. Agrawal, director of The National Research Laboratory for Conservation of Cultural Properties in Lucknow, India is studying the quality of Nepalese paper for conservation applications.

In Canada, John Grant of the Canadian Conservation Institute developed a number of techniques which use paper in sheet and fibre form to repair basketry.

These (Japanese paper) fibres have been applied as an adhesive paste macerated in a blender with carboxymethyl cellulose; also paper has been woven to replace missing areas. Other techniques involving paper fibres include casting paper pulp in a mould taken from a basket; this cast paper infill is then used in the areas of loss in the basket.

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#### TECHNICAL DEVELOPMENTS

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#### A MECHANICAL CLEANING METHOD FOR FEATHERWORK ON ETHNOGRAPHIC OBJECTS

The cleaning of feathers and other attachments on ethnographic objects often presents numerous problems to the con-

servator. By nature feathers are fragile and easily damaged. In most situations these feathers cannot be removed for cleaning without altering or further damaging the structure or integrity of the object.

Physical destruction to feathers is often the result of dust and grime accumulation. Discoloration, dulling, matting, distortion, brittleness, abrasion, breakage and loss of barbs are common manifestations. Successful removal of particulates without further damage to the feather structure by mechanical methods is often awkward if not impossible. Of particular difficulty are the downy or basal fluff feathers which are airy, delicate and without rigid structure. Problems can also involve the feather's attachment technology; stitching, tying and gluing feathers to wood, leather, basketry or fabric supports are common. The addition of surface enhancement technologies by use of dyes, paint or other parts can preclude the use of cleaning treatments.

Cleaning methods employed by conservators have usually fallen into categories of wet, solvent or mechanical cleaning techniques. Cleaning techniques attempt to remove damaging and disfiguring particu-

lates from surfaces. Mechanical methods utilizing brushes, compressed air, duster cans, and vacuuming are known to ethnographic conservators. Vacuuming methods have included simple water vacuums, surgical vacuums and most often conventional home vacuums used with a nylon or polyester screen or with a tapering flexible tube system.

The Dri-Clave Mono Vac evacuator is a device which has proved to be an exceptionally useful and improved tool for mechanical cleaning of feather work and related attachments on ethnographic objects. The primary advantages of the Dri-Clave for ethnographic object cleaning are its ease of use, its ability to work for long continuous periods, the quietness of its motor and the stainless steel collection chamber which is easy to clean.

The range and versatility of the tip apertures is convenient. The large 1 cm diameter tip is useful for intact but highly irregular surfaces. For small or delicate feathers, I have found the three interchangeable tips in the surgical multi-tip kit to be most useful. With these very fine apertures, it is possible to place suction at specific places; such as the underside of

small feathers or next to the support structure. Suction power is selected by a dial with adjustment increments of 1 to 10.

The Dri-Clave was designed for the dental industry and would normally be used to collect liquids. We have modified our unit slightly to improve the collection of dry particulates in the chamber. An 11 inch piece of vinyl tubing was added to the top of the inside of the chamber and extends virtually to the bottom. This allows the dry particulates to settle at the base of the chamber where we have about 1 inch of water (during use). This keeps the fine particulates from finding their way into the motor and facilitates filtering the collected debris through filter paper when desired.

Our Dri-Clave was purchased in 1984 for about \$250 from Columbus Dental, 1000 Chouteau Avenue, P. O. Box 620, St. Louis, Missouri 63188, U. S. A..

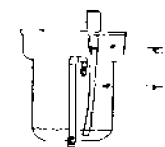
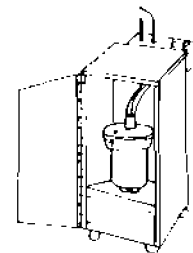
Correspondent:  
Nancy Odegaard  
Arizona State Museum  
The University of Arizona  
Tucson, Arizona 85721  
U. S. A.

#### ADAPTATION TO CHAMBER

Disc removed to allow insertion of tubing.

Laboratory tubing added to prevent dry, loose particulates

from entering motor. Instead they are collected in water.



Dri-Clave Mono Vac

#### Manufacturer's Specifications:

POWER UNIT By-pass motor 7½ AMPS at 115V (also available for 220/230 VAC).

SOLID STATE motor speed control gives variable air-flow.

PILOT LIGHT motor control switch combined with integral pilot light to indicate when power unit is on.

DIMENSIONS 26" high (including casters) x 12" wide x 14" deep.

SHIPPING WEIGHT 50 pounds

COLOURS Danish Walnut  
Dental Blue  
White Driftwood

Inquire about other colours.

. . . a further note on feathers, compliments of the International Institute of Conservation - Canadian Group Newsletter, Volume XI, No. 3, and gratefully reproduced here with the permission of the editor:

### PLEXIGLAS DOWELS FOR BROKEN FEATHERS

I find Plexiglas dowels superior to the traditional wooden toothpick dowels because they allow for greater flexibility of the repaired portion, thus reducing the danger of breakage should mishandling occur. They are appropriate when feathers are meant to stand at right angles to their anchor, especially with certain types of headdress where feathers were anchored only at the extreme tip of the shaft. These are also applicable to bent shafts or those which are completely severed. The other obvious benefit is that the dowels are virtually transparent, requiring no in-painting.

Method: Use solid Plexiglas \* rods, 1/8" or 1/16" diameter. Heat over hot-air gun, pulling softened Plexiglas until desired diameter is reached.

Dowel diameter can be adjusted depending on the size of the feather shaft and weight it

must support. I have found that even hair-thin Plexiglas strands can make very strong and flexible dowels. Cut to desired length and secure either end in the shafts. I prefer to use acryloid B-72 in toluene as an adhesive.

Mary Peever, Conservator  
Ethnology Laboratory  
Canadian Conservation Institute

\* Plexiglas is the trade name for an acrylic(plastic) made by Rohm & Haas.

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### NATIONAL MUSEUM OF ETHNOLOGY, OSAKA, JAPAN: International Symposium Report

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From December 2 to 9, 1985, the National Museum of Ethnology, Osaka (President: T. Umesao) held an international symposium on the conservation of ethnographic objects in museums with the kind financial support of the Taniguchi Foundation. The main subject was: to consider various problems of conservation of ethnographic objects which appeared as a result of the recent notable increase or re-organization of modern ethnographic museums. The term "ethnographic museum" in this case includes museums of folkloric collections, and some part of those of popular history museums. Recent advances and changes in actual

ethnology or cultural anthropology bring large influences to bear on modern ethnographic museums. One of the particular phenomena should be a change in respect to the value of ethnographic objects, that is, from their aesthetic value to their integral cultural value. As a result, large quantities of all kinds of objects used in ordinary daily lives have been transported to the modern ethnographic museum. Regarding such a new tendency, twelve invited participants discussed various topics, such as: mass inspection systems; treatment of fragile or relative-humidity-sensitive materials; that of composite materials with organic and inorganic materials; conservation of form and function of garments; ethnographic (or folk) conservation in open-air museums; formation of ethnographic conservators with sufficient knowledge of wide ranges of materials and their deterioration.

The symposium was organized with our Japanese customs and all participants passed a full one week together; in the daytime there were very serious discussions and in the evening there was sake-drinking on tatami. This is because we believed that contact with other cultural customs would serve as

benefits to our ethnographic conservators. 16.

Participants were: H. Daimaru (National Museum of Ethnology), M. Fukumoto (Museum of the Little World), F. Masuzawa (Gangoji Institute of Cultural Properties), N. Mino (Hokkaido History Museum), S. Miura (Tokyo National Institute of Cultural Properties), T. Morita (National Museum of Ethnology), R. Sugisita (Tokyo University of Fine Art), Pia Odgaard (Royal Danish Academy of Arts), C. Pearson (Canberra College of Advanced Education), C. Rose (Smithsonian Institute), S. Walston (Australian Museum), T. Umesao (President, National Museum of Ethnology). As observer was A. Howatt-Krahn (Canada).

The proceedings are now in preparation and should be published next spring as a special issue of "Senri Ethnological Studies" (English Bulletin of the N.M.E.).

Correspondent:  
Tsuneyuki Morita, National  
Museum of Ethnology, EXPO PK.  
10-1 SUITA-OSAKA JAPAN



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## COURSES

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Ruth Norton, lecturer in Objects Conservation at the Canberra College of Advanced Education in Australia, will be running a 3 week course in July 1986, on the conservation of baskets and mats from the Pacific and South-East Asia. The course is orientated to those people who are responsible for the physical maintenance of their collections.

The course will commence with artefact materials and construction, progressing through to deterioration, conservation ethics, treatments, and finishing with storage and display.

Funds have been provided by ICCROM; the Australian National Commission for UNESCO; and UNESCO Paris. The class is fully booked, and Ruth is hoping to publish course notes later this year. Should the course prove useful it may be possible to repeat the course style in other related topics for these areas.

For further information please contact Ms. R. E. Norton, Lecturer, Conservation Department, C.C.A.E., P.O. Box 1, Belconnen ACT 2616, AUSTRALIA.

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## CONFERENCES & SYMPOSIA

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Care and Preservation of Ethnological Materials - Symposium 1986

### Call for Papers

Ottawa, Canada, 28 September - 3 October/1986

Papers relating to conservation and curatorial aspects of the care and preservation of ethnological material are invited. These can include case studies, material science and technology, and curatorial and ethical problems relevant to the material cultures of Africa, Oceania, Australia and the Americas. Abstracts of approximately 200 words should be submitted together with audio-visual needs. Presentations should be 20 minutes and in either English or French. Submissions for posters will also be accepted at this time. Deadline for submission is June 30, 1986.

Information and registration forms are available from:

Symposium '86  
Canadian Conservation  
Institute  
1030 Innes Road, Ottawa, Ont.  
CANADA K1A 0M8

Symposium '86 sur l'entretien et la sauvegarde des matériaux ethnologiques

### Sollicitation de communications

Ottawa (Canada), du  
28 septembre au 3 octobre 1986

Nous sollicitons des communications sur l'entretien et la sauvegarde des pièces ethnologiques, c'est-à-dire leur restauration et leur conservation. On peut y examiner des cas concrets et traiter des sciences et de la technologie des matériaux ainsi que des problèmes de déontologie et de conservation posés par les cultures matérielles d'Afrique, d'Océanie, d'Australie et des Amériques. Il faut présenter des résumés de 200 mots environ et indiquer les besoins en matériel audio-visuel. Les exposés, en anglais ou en français, dureront 20 minutes. Nous acceptons aussi en ce moment les documents en vue des séances de démonstration. Date limite: le 30 juin 1986.

Pour obtenir des renseignements et des formules d'inscription, s'adresser à:

Symposium '86  
Institut canadien de  
conservation  
1030, chemin Innes  
Ottawa (Ontario) CANADA  
K1A 0M8

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## PUBLICATIONS/ BOOK REVIEWS

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RUTH E. NORTON, Storage and display of textiles (for Museums in South-East Asia). Studies and documents on the cultural heritage No. 8 UNESCO, Paris 1984, 64 pp, illus.,

(available from UNESCO, 1 rue Miollis, 75732 Paris, France).

As an instruction book for the collection manager, or untrained conservator, this manual is an essential item for immediate use. The text is concise and the diagrams clear, covering the physical storage and display of all types of textiles that may be found in a South-East Asian collection from costume to barkcloth.

The book is divided into four sections: Textile Storage; Textile Mounting Techniques; Supplies; Bibliography. The suggestions for storage and display can be adapted to be cheap and cost-effective depending on the budget for the collection.

Norton has reproduced effectively, diagrams from the likes of Johnson and Horgan's Museum Collection Storage, to present as many logical solutions to problems of display and storage. She sets out the pros and cons for the systems described, with words of warning and advice.

The pressure clamp for displaying barkcloth is sensible and can be used for other circumstances when stitching is inadvisable. The description for the use of velcro is included. This useful mounting material has often been used inadvisably (sewn directly onto the ob-

ject). There is now no excuse; the step-by-step account is precise and self-explanatory and encourages the untrained person to proceed with confidence.

For the conservator, the publication is a useful reference, particularly for the wide variety of storage and display techniques presented. It is certainly useful for inspiring the conservator to develop variations on a theme for the display of textiles. One would hope that after the "Basket and Mat" course which Ruth will be running in July 1986, the course notes may be presented in a similar fashion for that easy digestion.

Reviewer:

Karen Coote, Conservator  
Materials Conservation Division  
The Australian Museum  
6-8 College Street  
Sydney, N.S.W. 2000  
AUSTRALIA

Recent Advances in Leather Conservation proceedings of the June 1984 FAIC leather refresher course, is published by The Foundation of The American Institute for Conservation. The paperback book contains not only significant new developments in treatment, but also fundamental concepts and techniques for leather conservators. The transcribed presentations were given by

Course Guides Betty M. Haines, H.A.B. van Soest and Peter B. Hallebeek, as well as Guest Lecturer Jesse Munn and sixteen of the other participants. An extensive leather bibliography by Mary Garbin and product data are included. The Editor is Sonja Fogle and the Assistant Editors are Toby Raphael and Katherine Singley. The cost, plus shipping, is \$15 after August 31, 1985. Please make cheques payable in U.S. currency to AIC, and send orders to: AIC, 3545 Williamsburg Lane N.W., Washington, D.C. 20008, U. S. A.. Thank you very much.

Correspondent:  
Katherine Singley  
Assistant Editor

. . . and for more worthwhile information on leather and related subjects, I recommend LEATHER CONSERVATION NEWS, a newsletter with many interesting articles, such as "A Possible Adhesive for Native Tanned Skin" by Jan Vuori (Volume 2, Number 1). This adhesive mixture is based on Acryloid 672 and ethylhydroxyethylcellulose and may be very adaptable to other ethnological materials.

Information regarding this Newsletter may be had by writing to:

Leather Conservation News  
Materials Conservation Lab  
BRC 122  
10100 Burnet Road  
Austin, TEXAS 78758  
U. S. A.

(The LCN is now affiliated with the ICOM Working Group: Conservation of Leathercraft and Related Objects.)

Congratulations to the ICOM METALS WORKING GROUP on the publication of their newsletter, edited by Judith Logan. For further information, contact Cliff McCawley, Co-ordinator, Canadian Conservation Institute, National Museum of Canada, 1030 Innes Road, Ottawa, Ontario, Canada K1A 0M8.

The GETTY CONSERVATION INSTITUTE NEWSLETTER describes programmes and events which involve the international, as well as the national, conservation community, one such example being the international meeting on in situ archaeological conservation, held at the National Museum of Anthropology in Mexico City in April 1986.

Inquiries should be sent to:  
The Getty Conservation  
Institute  
4503 B Glencoe Avenue  
Marina del Rey  
California 90292  
U. S. A.

COMPUTER TECHNOLOGY FOR CONSERVATORS

edited by John Perkins, is a benchmark, softcover publication which collects twenty-one edited papers presented at the 11th Annual Conference Workshop of the International Institute for Conservation - Canadian Group. This workshop demonstrated considerable interest in computer-assisted conservation practice; the publication is available for \$20.00 Canadian, from:

The Atlantic Regional Group,  
11C - CG  
P. O. Box 8733, Station "A"  
Halifax, Nova Scotia CANADA  
B3K 5N4

Editor's Note: The Newsletter welcomes information regarding other publications - either periodicals or books - which may apply to ethnological conservation.

Papers from AIC

The Objects Specialty Group held its meeting in May 1986 during the 14th Annual Meeting of the American Institute for Conservation in Chicago, Illinois. The papers presented during that session cover a variety of topics in objects conservation; abstracts of the presentations will be printed in the Preprints of

the meetings available from the AIC office, 3545 Williamsburg Lane, N.W., Washington, D.C. 20008, U.S.A.. The session is also taped, and tapes of the complete presentations will be available following the meeting. The papers scheduled for presentation are, as follows:

Mounting Systems for Ethnographic Textiles and Objects:  
S. Gail Sundstrom Ninimaa, Textile Conservator, The Glenbow Museum, Calgary, Alberta.

Care and Preservation of Birch Bark Scrolls in Museum Collections:  
Mark Gilberg, Senior Assistant Conservation Scientist, Conservation Processes Research Division, Canadian Conservation Institute, Ottawa.

Conservation of a 19th Century French Monkey-Drummer Automaton:  
Valerie Reich, third year Art Conservation Student, Art Conservation Department, State University College at Buffalo in Cooperstown.

Search for Historic Air:  
Jane Poths and Allen Ogard, Isotope Geochemistry Group, Los Alamos National Laboratory, Los Alamos, New Mexico.

The Repair Treatment of a Large Polychromed Laminated Wood Sculpture:  
Louis Pomerantz, Conservator in Private Practice, Spring Grove, Illinois.

Preservation of Outdoor Public Monuments in Chicago:  
H. Winery Oppice, Sculptor, Chicago, Illinois.

Patination: Mineral Products and Dealloying:  
Claudia Deschu, Kress Fellow in Objects, Philadelphia Museum of Art.

Conservation of an Outdoor Marble Sculpture:  
Steven Tatti and Raymond Pepi, Conservators in Private Practice, New York, New York.

The Examination and Replication of a Tsimshian Stone Mask:  
I. Wainwright, Senior Conservation Scientist, Analytical Research Services, Canadian Conservation Institute, Ottawa.

Archaeological Field Conservation: A Personal View:  
Catherine Sease, Conservator, Anthropology Department, Field Museum, Chicago.

Field Conservation: Opportunities for Educating Archaeologists:  
Paul Storch, Assistant Conservator, Materials Conservation Laboratory, Texas Memorial Museum, University of Texas, Austin.

Ceramics Conservation: Organization and Procedures for Treatment:  
Stephen Koob, Conservator, Freer Gallery of Art, Washington, D.C.

Is Long-Term Stability Possible for Bronzes in the Field?:  
Christine Del Re, Conservator, University Museum, University of Pennsylvania, Philadelphia.

Treatment of Iron and Waterlogged Organic Material from Archaeological Excavations:  
Nancy Davis, Archaeological Conservator, Rochester Museum and Science Center, Rochester, New York.

Archaeological Conservation at the Museum of London:  
Helen Ganiaris, Conservator, Museum of London, England.

Friedrich Rathgen: The Father of Modern Archaeological Conservation:  
Mark Gilberg, Senior Assistant Conservation Scientist, Conservation Processes Research Division, Canadian Conservation Institute, Ottawa.

Correspondent:  
Sara Wolf Green  
Chair, Objects Specialty Group  
AIC

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

is available free of charge to conservators, scientists, curators and others with a professional interest in the care and research of ethnological collections.

The next issue is planned for January, 1987. The deadline for articles is November 15, 1986. Back issues are available on request, and will be included in the regular mail-out of subsequent issues.

Authors are asked to submit articles in English. As an option they are also welcome to submit copies of the article in the language of their countries of origin in order to share their work with colleagues at home.

DISCLAIMER:

The Newsletter provides a forum for ideas, but this does not imply an endorsement for any product or procedure; we cannot, therefore, be responsible for the application of same.

N.B.: "New Address:" Please forward inquiries regarding the Newsletter, as well as articles, to:

Ann Howatt-Krahn  
 Assistant Co-ordinator and Editor  
 ICOM - CC Working Group on Ethnographic Materials  
 c/o Howatt-Krahn Todd Conservators Ltd.,  
 123 West 14th Avenue - Suite C  
 VANCOUVER, BRITISH COLUMBIA  
 C A N A D A  
 V5Y 1W8

For information regarding our Working Group, please contact Co-ordinator, Sue Walston.

ICOM-CC Working Group on Ethnographic Materials  
 c/o Materials Conservation Division  
 The Australian Museum  
 6-8 College Street  
 Sydney, N.S.W. 2000  
 AUSTRALIA

For information regarding ICOM (The International Council of Museums) and the ICOM Committee for Conservation, please contact:

Maison de l'Unesco  
 1 rue Miollis  
 75732 Paris Edex 15  
 FRANCE