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Cahiers d'étude

Comité de Conservation (ICOM-CC)

Study series

Committee for Conservation (ICOM-CC)

INTERNATIONAL COUNCIL OF MUSEUMS
CONSEIL INTERNATIONAL DES MUSEES

Préface

Saraj Ghose
Président de l'ICOM

Je suis heureux de saluer la parution du *Cahier d'étude* du Comité international de l'ICOM pour la conservation. Je remercie tous ceux qui y ont contribué et en particulier Catheline Périer-D'Ieteren, Présidente du Comité, dont l'enthousiasme et la compétence ont permis la sortie de cette publication en un temps record.

Je souhaite que ce premier numéro de la série des *Cahiers d'étude* de l'ICOM soit suivi de nombreux autres et que tous les Comités internationaux aient à cœur, comme le Comité pour la conservation, de diffuser largement les données les plus récentes de leur discipline.

Foreword

Saraj Ghose
President of ICOM

I commend the publication of the *Study Series* of the ICOM International Committee for Conservation. I thank all those who contributed, particularly Catheline Périer D'Ieteren, Chairperson of the Committee whose enthusiasm and efficiency made this publication possible.

I express the wish that this first issue of the ICOM *Studies Series* be followed by many others and that all International Committees be eager to widely distribute, as does the Conservation Committee, their most updated information.

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Editorial – les enjeux actuels de la conservation- restauration*

Catheline Périer-D'leteren

Présidente du

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En publiant, pour le diffuser à l'occasion de sa XVII^e Conférence Générale à Stavanger en 1995, un *Cahier d'étude* sur la Conservation-Restauration, l'ICOM offre à notre Comité une occasion unique de sensibiliser un large public à la protection du patrimoine. L'optique de cette publication n'est pas de présenter un panorama exhaustif de la conservation-restauration dans le monde mais plutôt une sélection de thèmes d'intérêt général qui sont le reflet des préoccupations actuelles de la profession. Afin d'offrir aux lecteurs des outils de références, ces textes sont accompagnés d'une bibliographie sélective à caractère interdisciplinaire portant à la fois sur la restauration, l'histoire de l'art et l'investigation scientifique, et d'une brève description du champ d'action respectif des institutions s'occupant de conservation-restauration.

La multiplication et la diversité des dangers encourus par le patrimoine culturel dans notre société de consommation amènent tout naturellement à parler en premier lieu de la conservation préventive. La différence entre cette dernière et la restauration est clairement exprimée dans le texte *Le conservateur-restauteur: une définition de la profession* présenté en 1984 à Copenhague (1). «La préservation est l'action entreprise pour retarder ou prévenir la détérioration ou les dommages que les biens culturels sont susceptibles de subir, au moyen du contrôle de leur environnement et/ou du traitement de leur structure pour les maintenir le plus possible dans un état de stabilité».

«La restauration est l'action entreprise pour rendre un objet détérioré ou endommagé compréhensible en sacrifiant au minimum son intégrité esthétique et historique».

La notion de conservation-restauration a un long passé. Ainsi, déjà au

XIX^e s., John Ruskin en était un ardent défenseur lorsqu'il écrivait: «Prenez soin de vos monuments et il ne sera pas nécessaire de les restaurer». Cette attitude avait d'autant plus de sens qu'il reconnaissait dans l'authenticité de l'expression artistique la véritable valeur à sauvegarder. Personne, selon lui, ne peut retrouver la main et l'esprit de l'artisan ancien. Il préconisait donc que l'intervention soit réduite à la seule conservation au sens strict. Force est toutefois de constater que les préceptes de Ruskin, tant au XIX^e qu'au XX^e s., furent moins suivis en Europe que ceux diamétralement opposés prônés par Eugène-Emmanuel Viollet-le-Duc, pour qui les parties manquantes ou altérées se devaient d'être reconstituées sur la base d'analogies typologiques.

Le nouvel engouement pour les musées qui apparut dans les années 60-70 fut à l'origine de constructions de bâtiments, d'extensions ou de réaménagements d'édifices anciens sans que les mesures de préservation des collections ne soient ressenties par les conservateurs comme un enjeu important, leur préoccupation essentielle étant d'attirer les visiteurs. Malgré des conditions d'exposition dans les salles et d'entreposage dans les réserves souvent préjudiciables aux objets, il faudra attendre la mise en oeuvre en 1990 du *Plan Delta* par le Ministère néerlandais du Bien-être, de la Santé et de la Culture pour que les mentalités commencent à changer. Ce plan de sauvegarde du patrimoine culturel fut le catalyseur nécessaire pour faire prendre conscience aux conservateurs des Pays-Bas, mais aussi à ceux des pays limitrophes et du monde, de l'état déplorable de la plupart des collections publiques. Les professionnels réagirent, impressionnés par ce remarquable exemple et prouvèrent ainsi qu'une volonté d'action commune des responsables du patrimoine et des autorités politiques permet de réaliser un programme de redressement efficace en un temps réduit. Un premier colloque sur le thème de la conservation préventive fut organisé par l'ARAFU à Paris en 1989, un autre par l'IIC à Ottawa en 1994. La conservation préventive est aujourd'hui ressentie comme une tâche prioritaire pour chaque institution muséale ou responsable de biens culturels digne de ce nom. Néanmoins, pour assurer la pérennité du patrimoine mondial, le même message doit aussi être entendu par le public au sens large, en passant par la sensibilisation des enfants. Les facteurs humains, en effet, peuvent jouer un rôle tout aussi destruc-

teur que les catastrophes naturelles, en temps de paix comme de guerre. Il est évident que chacun, s'il n'y prend garde, peut occasionner par ses activités professionnelles ou ses loisirs, des dégradations à notre héritage culturel. Ainsi, par exemple, il convient d'apprendre aux générations actuelles à accepter l'idée que soit menée, au plan international, une politique restrictive et concertée des expositions temporaires et que le développement du tourisme de masse se doit d'être limité. Le contrôle de ces deux sources de dégâts importants devient une nécessité absolue si l'on veut soustraire les oeuvres d'art, comme les monuments et sites, aux multiples causes de dégradation qui les menacent aujourd'hui.

L'action de restauration, quant à elle, est soit curative, soit active. Comme telle, elle soulève d'autres axes de réflexion. Que le restaurateur prenne les mesures nécessaires pour arrêter un processus d'altération en cours ou qu'il intervienne sur un objet pour lui rendre sa clarté de lecture, sa responsabilité est grande. C'est pourquoi toutes les garanties doivent être prises pour que les décisions et la pratique de la restauration soient correctes. Nous touchons ici à deux domaines qui sont étroitement liés: la formation des intervenants et la reconnaissance de la profession de restaurateur. Le restaurateur, l'historien de l'art et le scientifique doivent être à même de développer une collaboration interdisciplinaire. Celle-ci est nécessaire pour poser un juste diagnostic critique qui guidera la restauration des diverses catégories d'objets artistiques ou ethnographiques dans le respect de leur intégrité physique et symbolique, en cherchant un juste équilibre entre leur dimension historique et esthétique. Le travail de restauration proprement dit doit être confié à un restaurateur aux compétences reconnues. Enfin, le respect des codes d'éthique de la profession fixera les limites de l'intervention et éventuellement en justifiera ses degrés en s'appuyant sur les résultats fournis par les examens scientifiques préalables. Les codes existants sont nombreux et forment d'utiles directives. Il convient toutefois, aujourd'hui, de les adapter aux différentes cultures et à toutes les problématiques liées à la signification particulière accordée aux objets. Il faut aussi veiller à faire respecter ces règles établies dans notre société en constante mutation où la valeur et l'authenticité du patrimoine constituent une préoccupation encore, trop souvent, secondaire.

Dans le domaine de la conservation-restauration, l'établissement d'une documentation scientifique ciblée, préalable à toute intervention sur l'objet, durant les divers stades de restauration et après le traitement, est vitale. Elle justifie l'intervention en fournissant les données de référence objectives et constitue la mémoire de la restauration pour le futur. Elle procure aussi une source précieuse d'informations pour la recherche en histoire de l'art car elle aide à mieux comprendre la genèse de l'oeuvre et son histoire matérielle. L'extraordinaire développement des programmes informatiques dans le monde exige qu'on y intègre de manière urgente, de façon systématique et selon des normes bien réfléchies, les données relatives à la conservation-restauration. Ainsi, il s'avère impératif de mettre en oeuvre lors de fouilles archéologiques des programmes spécifiques, particulièrement dans les pays arabes ou africains, où une profusion d'objets sont exhumés annuellement sans qu'un suivi matériel adéquat de ceux-ci ne puisse être assuré. Une banque de données enregistrées et aisément consultables réduirait les manipulations intempestives, les traitements inappropriés et donc les altérations qui font perdre une partie de l'information contenue dans l'objet.

Un tel outil constituerait aussi un frein au trafic illicite si tristement répandu.

Les mesures de conservation-restauration une fois prises, il convient à nouveau d'envisager l'avenir dans une perspective de prévention, en concevant des plans de surveillance et d'entretien à long terme – le contrôle étant confié à du personnel qualifié –, démarche essentielle qui, pour être trop souvent oubliée ou négligée, annihile les efforts humains et financiers consentis.

Ces quelques observations ne constituent qu'un aperçu thématique sommaire des sujets traités dans ce *Cahier d'étude* dont la lecture stimulera, je l'espère, la réflexion critique et incitera surtout à de fructueuses collaborations interdisciplinaires pour relever les défis auxquels la profession est confrontée en permanence.

* Je remercie vivement Gaël de Guichen, Ingrid Alexander et Annick Godfrind-Born pour l'aide précieuse qu'ils ont apportée à la mise en oeuvre de ce *Cahier d'études*.

¹ Ce texte a été rédigé sur la base d'un document de travail présenté par A. Ballestrin en 1978 et discuté la même année lors de la réunion triennale du Comité de Conservation à Zagreb. Il fut ensuite retravaillé par différents intervenants et membres de l'ICOM pour aboutir à sa version définitive de 1984

What's at Stake now in Conservation - Restauration*

Dr. Catheline Périer-d'Ieteren

Professor at
the Free University of Brussels
President of
the ICOM Conservation Committee

The publication by ICOM of this series of short essays on Conservation-Restauration to coincide with the organisation's XVIIIth General Conference, to be held in 1995 in Stavanger, offers our Committee a unique opportunity to encourage public awareness of heritage protection issues. Our purpose here is not to present an exhaustive panorama of conservation-restauration throughout the world, but, rather, to discuss a selection of themes of general interest that reflect the central concerns of the profession today. A selective inter-disciplinary bibliography is provided to refer readers to more detailed works in the areas of restoration, art history, and scientific investigation. Included also is a brief description of the specific fields in which conservation-restauration bodies are at work.

Our consumer society threatens cultural heritage in so many different ways that preventive conservation tops the list of our priorities. The difference between this concept and that of restoration is clearly explained in the text *The Conservator-Restorer: A Definition of the Profession*, presented at Copenhagen in 1984.⁽¹⁾

"*Preservation* is action taken to retard or prevent deterioration of or damage to cultural properties by control of their environment and/or treatment of their structure in order to maintain them as nearly as possible in an unchanging state".

"*Restoration* is action taken to make a deteriorated or damaged artefact understandable, with minimal sacrifice of aesthetic and historic integrity".

The concept of conservation-restauration is not new. Already, in the 19th century, John Ruskin was an ardent defender, telling his contemporaries: "take care of your monuments and you will not need to restore them".

This attitude was all the more meaningful as he recognised that only the authenticity expressed in the artist's work contained a value genuinely worth saving. His opinion was that it is impossible to reproduce the hand and mind of the original artisan. Hence his recommendation that intervention be limited to conservation *strictu sensu*.

The reality, however, is that in Europe in both the 19th and 20th centuries, Ruskin's precepts have not had the following of the diametrically opposed ideas of Eugène-Emmanuel Viollet-le-Duc, for whom missing or damaged parts had to be reconstituted on the basis of "typological analogies".

The fresh popularity that museums began to enjoy in the 1960s and 70s triggered off a wave of new buildings, extensions and alterations of old edifices, while curators, concerned essentially with attracting visitors, failed to recognise that conservation measures for their collections were a critical requirement. Although artefacts were often exhibited and stored in highly prejudicial conditions, it was only in 1990, when the Dutch Ministry for Well-being, Health and Culture introduced its Delta scheme, that attitudes began to change. This plan to save the nation's cultural heritage galvanized curators in the Netherlands to a new awareness of the deplorable state of most public collections. The reaction among professionals, impressed by the remarkable example set by the government, demonstrated how joint action on the part of heritage administrators and political authorities can successfully implement an effective rebuilding programme in a relatively short space of time.

An initial symposium on the theme of preventive conservation was organised by ARAAFU in Paris in 1989, and another by IIC in Ottawa in 1994.

Today, all self-respecting museum bodies or administrators of cultural property recognise that Preventive Conservation is a priority. Yet, to guarantee the long term future of the world's heritage, this message must be understood by the public at large, starting with children. This is because human factors can be just as potent as natural disasters in causing destruction, both in peace and war. It is clear that any individual, whether at work or during leisure time, can, for want of care, cause damage to our cultural heritage. This, for example, is why current generations should be taught to accept the need for a concerted, international policy to restrict temporary exhibitions and limit mass tourism. The need to check these two sources

of large scale damage is becoming an absolute necessity if we are to save works of art, monuments and sites from the multiple causes of damage that threaten them at the present day.

Restorative action may be either curative or active. As such, it raises several issues. The conservator's responsibility is considerable, whether in taking necessary measures to halt a process of degradation that is already under way, or in acting to increase the "legibility" of an artefact. This places a premium on right decisions and proper practice in restoration.

What we are looking at here are two closely linked areas: professional training and the recognition of the profession of restorer. The latter, must be capable of developing inter-disciplinary collaboration with the art historian and the scientist. This is a necessity if an accurate critical diagnostic is to guide the restoration of different categories of artistic or ethnographic objects, respecting their physical and symbolic integrity, and striving for a proper balance between their historical and aesthetic dimensions. The actual work of restoration must be entrusted to a conservator with recognised skills.

Finally, respect for professional codes of conduct will set the limits of the restorer's scope and ultimately justify the degrees to which the restorer may act, because decisions will be based on the results of preliminary scientific examination. There are many existing codes of conduct which set out useful directives. Today, however, they should be adapted to different cultures and to the whole range of issues linked to the specific meaning ascribed to the objects. It is also necessary to ensure that these rules be respected in our constantly changing society where the value and authenticity of the heritage is still, too often, a secondary concern.

In the field of conservation-restoration, it is vital that targeted scientific documentation be established, prior to action on any object during the various stages of restoration and after treatment. This documentation justifies the intervention by providing an objective set of reference data. It provides a lasting record of the restoration process. It also provides a precious source of information for research into art history, by helping to improve understanding of the work's genesis and material history. Computer software has developed throughout the world to such an extraordinary extent that it is now imperative and urgent that conservation-restoration related data be integrated systematically into

such software, in compliance with well thought-out standards. Consequently, it is imperative that specific programs be implemented at archaeological excavations, particularly in Arab or African countries, where a wealth of objects are uncovered each year without adequate provision for their safeguard. A data bank, easy to consult, would reduce cases of improper handling, inappropriate treatment and, consequently avoid the loss of much of the object's informational content. An instrument of this kind would also be an obstacle to the illegal dealing that is, sadly, so widespread.

Once conservation-restoration measures have been taken, the future should be approached in terms of prevention, by designing long term surveillance and maintenance plans - controlled by qualified personnel - an essential approach, the frequent neglect of which cancels out the human and financial efforts made.

These observations are of course only a brief, thematic introduction to the subjects discussed here, which, I hope, will stimulate critical thinking and, especially, foster productive inter-disciplinary collaboration to meet the challenges that constantly face the profession.

* I am very grateful to Gaël de Guichen, Ingrid Alexander and Annick Godfrind-Born for their invaluable help in putting together this selection.

¹ This text is based on a working document presented by A. Ballestren in 1978 and discussed the same year at the triennial meeting of the Conservation Committee in Zagreb. It was then reworked several times, including by ICOM members, before the final version was established in 1984.

La conservation préventive: un changement profond de mentalité

Gaël de Guichen
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Abstract

Preventive Conservation is an old concept in the world of museums but it is only within the last 10 years that it has started to become more organized. It requires a profound change in mentality.

Where yesterday one saw objects, today one should see collections.

Where one saw rooms, one should see buildings.

Where one thought in days, one should now think in years.

Where one saw a person, one should see teams.

Where one saw short-term expenditure, one should see long-term investment.

Where one shows day-to-day actions, one should see programme and priorities.

Preventive conservation means taking out a life insurance for museum collections.

Conservation, restauration, préservation – mots utilisés indifféremment par les uns et au contraire avec des significations bien spécifiques par les autres.

En fait, il est curieux de voir que la profession n'a jamais défini ces termes de même que d'ailleurs la plupart des grands organismes nationaux ou internationaux. Il suffit de prendre l'ICCROM (Centre international d'études pour la conservation et la restauration des biens culturels) dont le nom indique clairement deux orientations différentes: la conservation et la restauration. L'ICOM, quant à lui, a un Comité international de Conservation – mais qui s'occupe alors de restauration ? Au niveau national, et pour ne prendre que deux pays, l'Italie a un Institut Central de Restauration. Cela veut-il dire qu'en Italie la conservation n'existe pas? Quant au Canada, il possède un Institut Canadien de Conservation, ce qui laisserait entendre que la restauration n'y a pas de place.

La conservation préventive s'implante

Il n'est pas dans mon intention d'entrer dans un débat terminologique car pour compliquer la situation, en quatre ans, une nouvelle expression est fréquemment utilisée: la «conservation préventive». Est-ce une fuite en avant, un tour de passe-passe, un nouveau gadget ou un concept important qui va nous obliger à modifier nos habitudes, notre façon de travailler et qui, de ce fait, devrait être introduit dans les cursus de formation de toute personne qui se propose de travailler dans un musée?

En fait, le concept n'est pas vraiment nouveau. Il était dans l'air depuis longtemps, très longtemps. Déjà au 19^{ème} siècle, Adolphe Napoléon Didron, écrivait: «Conserver le plus possible, réparer le moins possible, ne restaurer à aucun prix», laissant entendre qu'il fallait intervenir le moins possible sur l'objet pour assurer l'authenticité de son message.

Au cours de ce siècle, avec l'ouverture de nombreux musées, le développement des collections existantes et la création de collections nouvelles, la masse des objets sur laquelle on «aurait pu intervenir» a tellement augmenté que le restaurateur classique a été très vite débordé par l'ampleur de la tâche, quand il n'était pas uniquement absorbé à la préparation des objets sélectionnés – faut-il les envier ou les plaindre? – pour une exposition temporaire ou partant pour une exposition itinérante. Ce qui est certain, c'est que dans un nombre très important d'établissements, une masse d'objets s'est trouvée accumulée, non inventoriée, abandonnée dans des locaux souvent malsains et, le temps passant, ces collections ont subi des dégâts irréversibles.

Dans les années 1970, Garry Thomson, au vu des problèmes posés par l'installation assez systématique de la climatisation dans les galeries de peinture, démontrait l'importance du contrôle du climat autour des collections. Il en faisait de même avec la lumière. De cette époque date le dicton:

«Un mauvais restaurateur peut détruire un objet par mois.

Un mauvais conservateur peut détruire une collection entière en un an».

Devant l'ampleur des destructions constatées et documentées, l'ICCROM lançait un cours de recyclage de trois semaines sur la conservation préventive, et *Museum* publiait un numéro

spécial intitulé «La conservation, un défi à la profession» (Vol. XXXIV N° 1, 1982).

L'idée qu'il fallait changer d'attitude si l'on voulait assurer un futur aux collections gagnait lentement du terrain mais une réflexion organisée et une mise en pratique se faisaient attendre. Il est donc réconfortant de constater que depuis trois ans, des signes très encourageants sont apparus.

Premier signe: une reconnaissance de la discipline «conservation préventive» avec la réalisation de deux congrès: l'un organisé à l'UNESCO par l'ARAFU (1) du 8 au 10 octobre 1992, l'autre à Ottawa par l'IIIC (2) du 12 au 16 septembre 1994. Ainsi le monde francophone et le monde anglophone désirant en savoir plus peuvent se référer à 88 communications qui illustrent les connaissances et les orientations actuelles dans le domaine.

Deuxième signe: le lancement, en 1991, du programme national de sauvegarde des collections aux Pays-Bas avec le Plan Delta (voir p. 6) qui devrait servir de modèle à de nombreux autres pays.

Troisième signe: le lancement d'un programme Prévention dans les Musées Africains – PREMA -, qui s'applique à 32 pays et se poursuivra sur 14 ans.

Quatrième signe: la création en 1994 d'un diplôme d'études spécialisées en conservation préventive à l'Université de Paris I où, pendant un an, sont accueillis des conservateurs, des architectes, des restaurateurs, des ingénieurs, venant se spécialiser dans la discipline.

D'autres signes doivent être mentionnés à l'échelon local comme la créa-

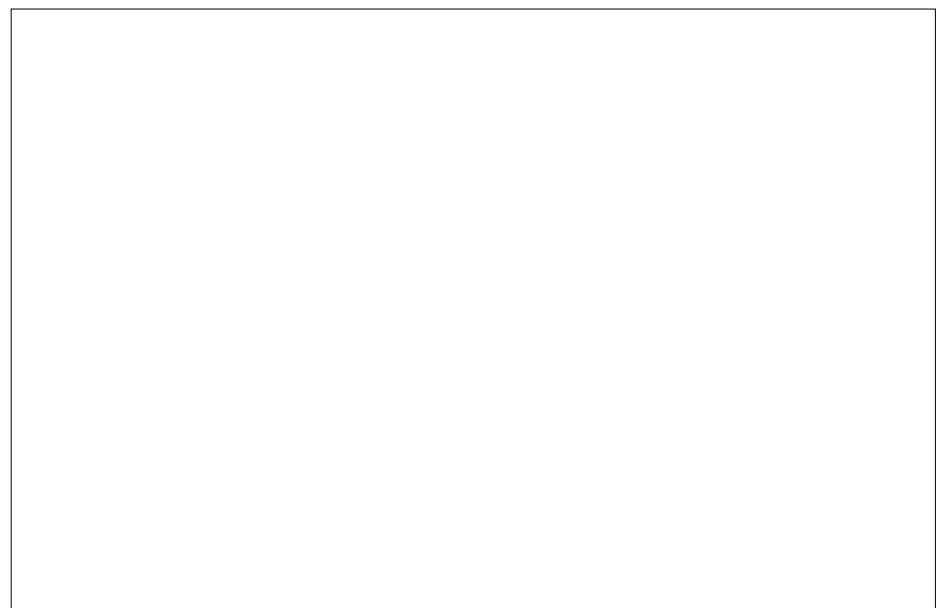
tion d'un poste «conservation préventive» dans des grands musées et instituts.

Comment définir aujourd'hui la conservation préventive?

Sans aucun doute et sans s'être définie, la conservation préventive a pris place dans les musées. Il est urgent de la délimiter et de définir son but.

Faute de mieux, je dirai que la conservation préventive est «l'ensemble des actions destinées à assurer la sauvegarde (ou à augmenter l'espérance de vie) d'une collection ou d'un objet». Certaines de ces actions seront directes, d'autres indirectes. Certaines seront très générales (adoption d'une loi), d'autres très spécifiques (contrôle de la lumière). Certaines actions enfin seront le fait de l'administrateur (allocation des fonds nécessaires, définition du poste de conservation préventive), de l'architecte (choix du type de matériaux pour le bâtiment), du conservateur (établissement d'un plan de conservation préventive globale, d'un inventaire, refus ou acceptation du prêt d'objets sensibles), du restaurateur (enquête de conservation) et même des éducateurs (sensibilisation du public aux problèmes de la sauvegarde des oeuvres). En fait, tout le personnel d'un musée à un titre ou à un autre a des responsabilités de conservation préventive.

La conservation préventive part de la constatation qu'un objet quel qu'il soit peut disparaître à tout moment et qu'avec lui disparaît un message que le personnel des musées a la responsabilité de transmettre (et soit dit en passant est payé pour le faire!).



La conservation préventive requiert un changement profond de mentalité:

Qui pensait hier objet, doit aujourd'hui penser collections;
Qui pensait salle, doit penser bâtiment;
Qui pensait semaines, doit penser années;
Qui pensait personne, doit penser équipe;
Qui pensait dépense à court terme, doit penser investissement à long terme;
Qui pensait étroit, doit penser large;
Qui pensait au jour le jour, doit penser programme et priorités.

La conservation préventive consiste à prendre une assurance sur l'avenir des collections.

Seules les espèces développées s'assurent pour l'avenir de leurs biens.

Il est temps que dans les musées nous nous comportions comme telles.

¹ Association des Restaurateurs d'Art et d'Archéologie de Formation Universitaire

² The International Institute for Conservation of Historic and Artistic Works

Aspects to the large scale operation to save the dutch cultural heritage-activities at the Rijksmuseum voor Volkenkunde

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Résumé

Le gouvernement néerlandais a voté un budget de 200.000.000,- Fl. pour sauvegarder le patrimoine culturel national.

Cette action d'une durée de huit ans (de 1992 à 2000) concerne tous les musées nationaux. Ce Plan Delta a permis au Musée National d'Ethnologie de transférer, en quatre ans, dans un dépôt bien climatisé, 210.000 objets qui étaient conservés dans des conditions déplorables. Les objets sont tous nettoyés, partiellement restaurés, photographiés

et pourvus d'étiquettes à code barres. En même temps, l'enregistrement des pièces est automatisé. Cette action a été possible grâce au dévouement de 45 chômeurs nommés temporairement.

In the Netherlands the General Audit Office inspects a different Government Department yearly to account for the money spent. Thus, in 1988, the seventeen State Museums were 'x-rayed'. The Office concluded that in terms of collection management most museums did not meet the standards. Astonishing arrears were brought to light. In many cases, a satisfactory registration was not kept and objects could not always be traced. Storage conditions were staggering sometimes: artifacts stacked on top of each other, pushed into cupboards made of wood with all sorts of harmful emissions in rooms without any environmental control. They had come across extreme temperature and humidity levels with large fluctuations, excessive light conditions, dust, air pollution, insect and rodent infestation and mould. The Dutch National Collection evidently was in jeopardy. Of course there have been museum directors and experts in the past who had to some extent, signalled these circumstances, but too little money had been assigned for this goal.

So despite the Ministry of WVC's (Welfare, Health and Cultural Affairs) awareness of this situation, the extent of the backlog came to them as a com-

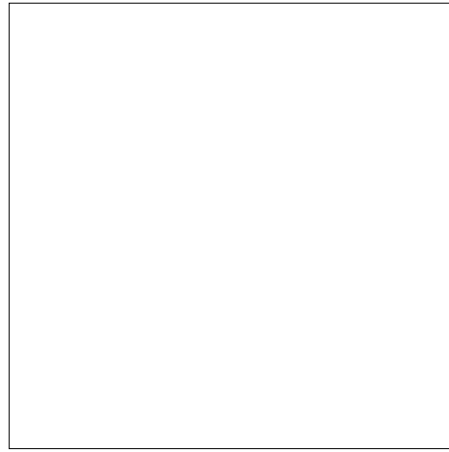
plete shock. The audit's report in fact created a favourable climate for a change because at the same time the Dutch Government was already planning the privatisation of the State Museums. It was said that something drastic should be done about this dreadful situation before any privatizing could be discussed at all. Stimulated by public opinion and newspaper articles, a large scale operation was set up. It was given the ingenious name Delta Plan ¹ for the Preservation of Cultural Heritage. This received the support of the Government, and other politicians too. For this a sum of over Nlf 400 million was allocated for the period 1992 - 2000.

At first the WVC estimated the scale of arrears in registration and conservation of the collections. Then museum staffs were asked to make rescue plans for their own situation. Priorities we-

re given to the museums with the least problems – the sooner they stood on their feet again, the better. Among the three institutions which remained with enormous backlogs, the Rijksmuseum voor Volkenkunde (RMV) – the Netherlands National Museum of Ethnology – ranked second. This museum, founded in 1837, in the old university town of Leiden, has been housed in a former hospital since the 1930s. It owns more than 210,000 objects. These are artifacts from non-European cultures, made of all sorts of materials, like wood, metal, clay, stone, bone, skin, feathers, paper, textiles and any more. They were either stored in dry and dusty attic store-rooms, or in the nasty, humid and mouldy conditions in the basement stores.

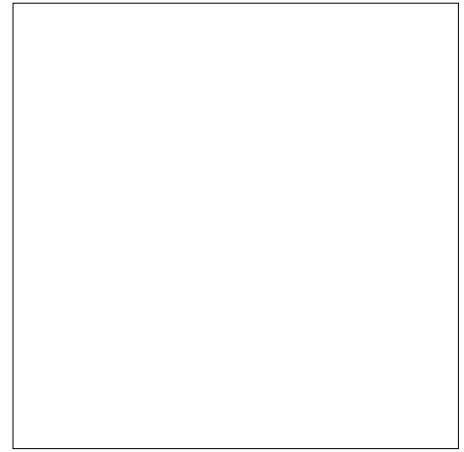
The RMV made up an estimate to deal with its backlogs. The costs were calculated to amount to *Nlf* 62 million. The attic store-rooms were to be renovated with dust-filtered airconditioning. In there daylight and UV radiation are to be kept from the collection, which would be stored in new metal racks and drawers, braced with inert supports where needed. A reorganisation of the museum staff took place and collection management became the responsibility of a brandnew department. A plan of action was unfolded. In cooperation with the local Labour Office and Social Service in 1990 a group of long term unemployed people was given a 4-year job of automating the existing manual inventory cards. At this moment the database consists of 195,000 records with a basic registration.

In 1991, the first renovated attic store-room became available. So then a



second group of unemployed people was enlisted, selected for their attitude towards objects. Their task was to move, clean, label, photograph and restore the collections. For this, they followed courses in handling and transporting museum objects, packing and unpacking and storing and sustaining them. They learned how and when to clean them – and when not to. They were taught the ins and outs of passive conservation and about the prevailing hazards from environmental changes and from light. They know how to act when they recognize insect and rodent activity. The Social Service financed their wages in the initial year only; so afterwards the museum offered them temporary jobs until the end of 1996, financed by the Delta Plan funds.

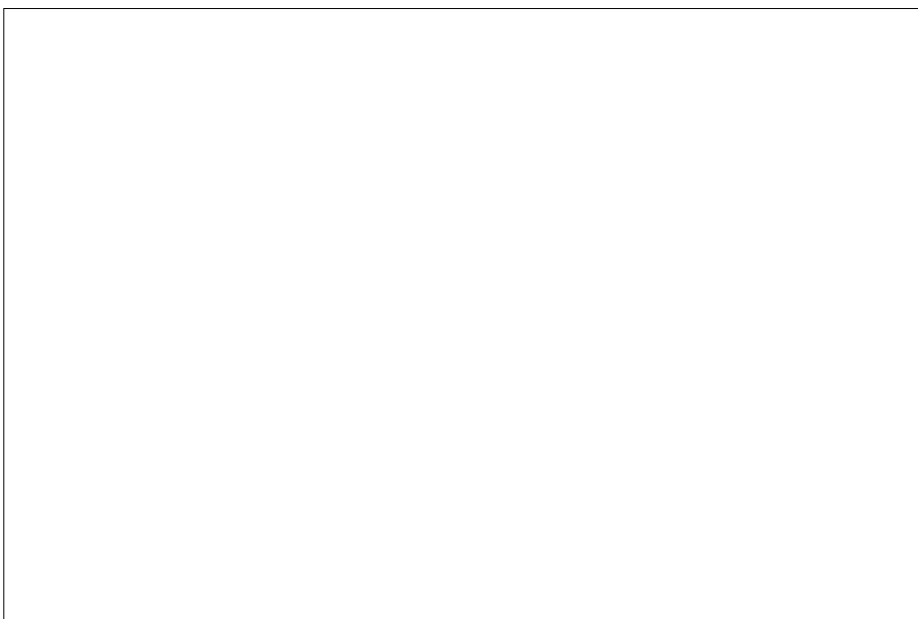
This is how the work is done. In the building in Leiden a large well-organized work space is established. Objects taken from storage are brought in here and exposed on a table, where skilled conservators offer advice on



cleaning and storage. If the artifact is dusty, a museum technician will clean it with soft brushes, aided by vacuum cleaners with adjustable speed and equipped with special filters. When necessary they wear protective clothing, gloves and filter-masks. Objects which are mouldy are cleaned in a separate room.

The database makes it possible to print a label for each individual object, listing the inventory number (which is also bar coded), the cultural region of origin and the object's name. A second bar code gives it a chronological sequence. This label is sorted out of the stock when the object involved is under treatment and if possible, attached to it. With the help of the bar code a still video photograph is taken and stored on CD-Rom. This image database is converted within the text database and thus gives the curators a wide range of new research possibilities. For the objects this means an improvement. Instead of a scholar going into the storage and handling several other objects before finding the right one, they now can browse through the computer, and browse and browse again without touching and thus affecting the artifact itself. After photographing the object, the museum technicians prepare it for storage, with templates and other forms of support when needed. If required, a conservator can be called in for advice.

The museum building in Leiden is surrounded by a ditch, a remnant of the old city moat. Eventually this causes humidity in the basement store-rooms, which really cannot be made fit for storage. So instead of re-using these, four sheds at a distance of 25 miles from Leiden became available in 1994, with a 4,000 square meters storage facility. For these the isolation and air-conditioning have to be impro-



ved to become museum storehouses in the right sense of the word. Now, if objects are scheduled to be stored in the outside depot, they are carefully packed together with their supports before transporting them. The arrangement and organisation of each store-room is coordinated with the curators involved. To conclude the work on each object the data about its location is converted into the databases mentioned.

This Delta Plan activity within the RMV was made possible due to some favourable factors. At first, the sponsoring authority – the Government – recognized the urgency to cope with the backlogs. Secondly, the museum staff was willing to admit to its own inabilities and reorganized itself in combination with contracting new expert people to do the job. And thirdly, it was possible to combine those factors with the available unemployment pool from Leiden. In fact, people from places farther away, and even volunteers, strengthened this group of currently highly skilled museum technicians. Without them all our planning would have remained a paper tiger. So it is to them that our thanks are due in the first place.

Re-storage is not a final solution for all the problems. Nowadays it seems hardly possible to replace a lost ethnographic artifact by a similar new one, as it was done in the past. These sorts of objects are made out of materials which normally will last not much longer than three generations. Continuous plans are to be developed for active conservation to slow down any natural decay, as much as possible, and if necessary, carried out on a large scale basis. I am referring to taking care of problems like embrittled plant fibres, desiccated leather, rusted spear points, loose parts or pigments, weak structures – to name a few. This will be a task for conservators, advised by curators and assisted by a team of skilled museum technicians, to do the bulk work. With our large collection this task will bring us far into the next century. We hope the future politicians in the Houses of Parliament will continue to perceive the need for support of this particular Delta Plan, until all our arrears will have become history.

¹ This title was chosen because a widespread national commitment was needed due to the large scale of the operation in terms of means and time involved. In fact a long term investment was needed. The previous occasion this was deemed necessary was after the flooding of the estuary area in the southwest of Holland, after a dreadful gale on the first night of February 1953. The then designed Delta Plan provided for the building of stronger and higher sea dikes and a now

world-famous system of hydro-engineering. At the same time when I started to write this article, 3 February 1995, inundation caused by heavy rainfall had occurred in France, Belgium, Germany and the Low Countries. The Dutch again united to fight the flooding as 250,000 were forced to flee homes. In the House of Parliament the Prime Minister called for another Delta Plan, now for the rivers. «Let us put our hands together to the plough», he said.

Conservation préventive: des réserves sous haute surveillance

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Abstract

Too often apart of every day's museum life, the reserve is a very sensitive place for preventive conservation. In order to maintain with efficiency the rules of preventive conservation, it is necessary to provide a regular human presence near the collections. Well prepared registrars should be in charge for the store rooms of each museum, under the authority of curators. This full time responsibility could very much help preventive conservation and make the reserve collections more accessible to a largest public.

De nos jours tous les professionnels de musées sont censés connaître les principes de la conservation préventive: maintenir un climat stable, une humidité relative équilibrée, protéger les collections de la lumière, des rayons U.V., de la chaleur et de la poussière, les placer dans des vitrines et sur des supports adaptés qui évitent les déformations ou les vibrations excessives, enfin prendre les précautions d'usage contre le vol ou l'incendie.

Cependant, la connaissance de tous ces principes reste inutile si elle n'est pas accompagnée d'une attention quotidienne et partagée à la façon dont ils sont appliqués. Dans les salles du musée, la présence du personnel, le regard du public rappellent à l'ordre au cas où l'accoutumance ferait oublier d'être attentif.

Mais dans les réserves, les collections sommeillent trop souvent. On ne les montre pas, on ne les voit pas, on oublie qu'elles peuvent se dégrader tout autant que dans les salles... et souvent

bien davantage...car en général les réserves sont les parents pauvres de l'équipement nécessaire à la conservation préventive. Quand bien même on y disposerait des appareils nécessaires pour contrôler le climat, est-on vraiment organisé pour surveiller et régler régulièrement ces appareils?

Dans les réserves plus qu'ailleurs, le mot d'ordre de la conservation préventive, c'est la vigilance et donc la présence humaine. Présence pour entretenir, ranger, dépoussiérer, surveiller les foyers d'infection par les insectes ou les moisissures.

Il faut non seulement des moyens en équipement dans les réserves mais des moyens en personnel et surtout un personnel formé et motivé. C'est en effet un véritable métier que celui de régisseur des réserves, un poste que l'on oublie bien souvent de pourvoir. Au Musée national des arts et traditions populaires, nous sommes très attachés à cette fonction, même si la création de tels emplois ne va pas sans poser de problème.

Le régisseur est le bras droit des conservateurs et des restaurateurs, il est cette vigilance quotidienne au service du bon état des collections. Pour les conservateurs et les spécialistes qui viennent étudier dans les réserves, il organise un rangement rationnel des collections, il contrôle leur entrée, leur sortie, leur retour dans les rayons, il est formé à la manipulation des objets fragiles ou pesants.

Avec les restaurateurs, il procède au contrôle de l'état des objets, à la mise en oeuvre de supports appropriés; il veille au bon fonctionnement des thermohygromètres et des climatiseurs. Il est aussi responsable de la sécurité des oeuvres, contrôle l'accès aux réserves, qu'il peut faire visiter aux personnes autorisées. Enfin, il est formé au maniement des extincteurs et connaît les consignes à appliquer en cas d'incendie.

La présence de professionnels dans les réserves les rendent plus vivantes: les conservateurs et les chercheurs y viennent plus volontiers car ils savent qu'ils seront assistés pour trouver et manutentionner les oeuvres qui les intéressent. Les réserves sont un lieu passionnant à visiter lorsqu'on peut y être accueilli dans les conditions nécessaires de sécurité. Et, dans ces conditions, on peut aussi en faire un lieu de formation et d'expérimentation. Les enseignants en muséologie, en restauration peuvent y donner des cours

ou y organiser des stages qui débouchent sur des cas concrets.

Rendre ainsi les réserves plus vivantes et plus professionnelles, c'est une autre manière de restituer les collections au public, du moins à certaines catégories de public, tout en améliorant les conditions de conservation.

The Effects of Relative Humidity and Temperature on Exhibited Objects

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David Erhardt,
Marion F. Mecklenburg, and
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Résumé

Les variations de température et d'humidité relative jouent un rôle prépondérant sur l'état des objets de musées. On peut déterminer les limites requises par ces paramètres environnementaux en examinant les propriétés matérielles des composants.

On considère que, pour la plupart des objets, les variations d'humidité relative doivent se situer entre 35% et 65% et les variations de température entre 18° et 25° Celsius, c'est-à-dire dans le même ordre de grandeur que pour le confort humain.

Proper environmental control is the most important factor in the preservation of collections. While environmental factors such as light, pollution, and vibration also affect museum objects, temperature and relative humidity (RH) have an overriding effect on their stability.

Consider relative humidity and its variation. A relative humidity of about 50% with little variation has been considered ideal for the overall exhibition and storage environment by many museum staff. This environment, however, is difficult and expensive to maintain throughout the year. If the environmental requirements could be relaxed without causing damage, climate control would be much simpler. Relaxing environmental control requires answering two basic questions. First: do all RH fluctuations, no matter how small, cause damage, or is there a threshold of allowable RH fluctuation below which there is no damage?

Second; if some fluctuation is allowable, how much?

To identify an acceptable RH and allowable variation the relevant material properties of the objects must be known. These properties are dimensional and mechanical changes due to RH. From theoretical calculations derived from and utilizing the results of empirical measurements, the range of relative humidity in which MOST objects are mechanically stable is between 35% and 65%. The mechanical changes which most materials, even those under restraint, undergo during RH fluctuations in this region are elastic and reversible. While higher relative humidities up to 65% may not be suitable for some objects because of the possibility of mold or increases in chemical reactivity, many objects can be exhibited within this range of RH with no damage from dimensional change. Exceptions to this principle are based on other non-mechanical behavior such as the corrosion of metals. These objects should be kept in their own climate controlled containers or cases.

Often objects are recovered from adverse environments such as under water or extremely humid storage conditions and such objects must be treated in ways so that changes in dimension coupled with restraints by their own construction do not allow damage to occur. Some objects equilibrated to a high RH (80+%) will crack when brought into a drier environment, especially if there is also an accompanying temperature change. The damage is caused by the specific starting and ending RH, not necessarily the wide range in RH. If possible, objects at risk may be disassembled to allow for equilibration without restraint. The preservation of objects depends upon avoiding the extremes of high or low RH. Establishing an average value of 50% RH results in a relatively large allowable range of fluctuation about this mean value, since most hygroscopic materials are significantly less responsive to RH changes near this value.

The temperature of museums is usually set by considering the comfort level of the visitors and workers. This temperature has often been set between 18 and 25°C with a minimum amount of fluctuation. The same reasoning applies to the discussion of temperature as was applied to relative humidity. Changes in temperature between the above limits will also have a dimensional and mechanical effect upon museum objects. If a restrained object is subjected to large variations in temperature, stresses may develop in the object that can lead to deformation or damage. However, in most cases little effect seems to be caused by changes in temperature within the 18-25°C range. Other problems may arise that are not at first obvious. As temperatures drop, certain materials, such as acrylic paints, may become stiffer and stronger but also may become more fracture sensitive. These materials will become more susceptible to damage by shock and vibration because of their embrittlement.

Lowering the temperature below the 18 to 25° C range can significantly reduce the rate of chemical decomposition of many materials. This effect is useful in the long term storage of objects that are sensitive to ongoing chemical degradation. For example, the lifespan of photographic materials kept at 0°C or below can be hundreds of times that of materials stored under ambient conditions. Most photographic media are mechanically tolerant of sub-zero temperature. Changing the temperature of a building can be a sensitive method for controlling the RH of the building since as temperatures drop RH will increase and, conversely, as temperatures increase RH will decrease.

The general museum environment is a compromise between human comfort, the costs and feasibility of maintaining desired conditions, and the preservation of the exhibited objects. Selecting and maintaining the proper temperature and humidity ranges can be both economical in heating and cooling resources and beneficial to the exhibited objects.

Open-heart Restoration: Raising the Awareness of the Public

Roberto Nardi

Directeur du Centro di Conservazione Archeologica Roma

Résumé

Au cours des dernières années, de plus en plus de chantiers de restauration ont été ouverts au public. On peut dire que, de façon générale, le monde de la conservation a été plus soucieux d'informer les médias et le grand public.

Dans cet article, nous examinerons ce phénomène sur la base de l'expérience du Centro di Conservazione Archeologica di Roma (C.C.A.), qui, pendant dix ans, a ouvert ses chantiers de restauration au public quand les circonstances l'ont permis.

De cette action d'informer les visiteurs, il ressort que chaque fois que l'attention du public a été engagée, on a obtenu des résultats positifs soit à court terme soit à long terme; à court terme, il y a eu une grande participation à l'initiative et à long terme une sensibilisation accrue aux problèmes de conservation. Si nous croyons donc que la protection des biens culturels doit passer par des moyens de prévention, il est évident que la sensibilisation du public est un élément clé. Ce seront les citoyens eux-mêmes qui, un jour, ressentiront la responsabilité et le plaisir de protéger leur patrimoine culturel.

In recent years, restoration projects have more and more often been open to the public, as, for example, the treatment of Veronese's *Marriage at Cana* in Paris or (using guided tours) the restoration of the Sistine Chapel. We may say that, in general, there has been an increase in the attention paid by the world of conservation to informing the media and the general public.

In this paper we will examine this phenomenon in the light of the experience of the Centro di Conservazione Archeologica di Roma (C.C.A.), which in the last ten years has opened its restoration worksites to the public whenever circumstances permitted.

Let us summarize these initiatives:

* 1984, Arch of Septimius Severus in the Roman Forum: the delegates to the Assembly General of ICCROM visit the site. Objective: to show the

restoration site to some of our colleagues.

* 1985, Arch of Septimius Severus: the Archaeological Superintendency of Rome, as part of its «Cultural Heritage Week,» organizes, in collaboration with the restorers, guided public tours of the site. Objective: to raise public awareness on the subject of the deterioration of monuments from atmospheric pollution.

* 1986, Crypta Balbi, in the center of Rome: once again in the context of «Cultural Heritage Week,» the Archaeological Superintendency of Rome organizes guided tours for the public of the excavation site and the restorations. Objective: to provide visitors with the opportunity for a close-up view of how the city has become stratified in the twenty centuries of its existence and for comprehending the extraordinary importance of the archaeological message.

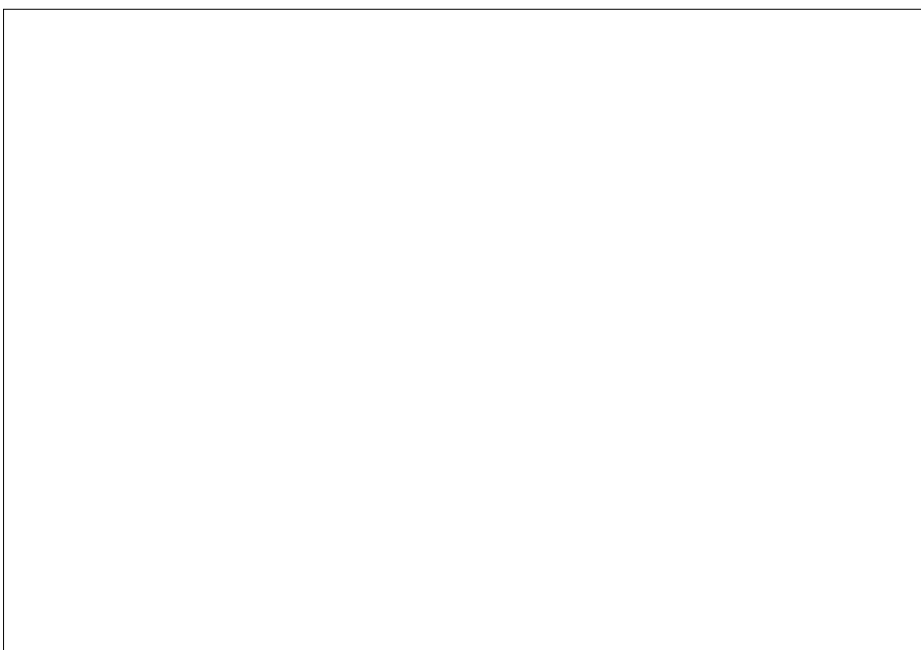
* 1990, Atrium of the Capitoline Museum: the restoration of the architectural structure of the palace and of the collection of statuary displayed inside is open daily to the public, who can thereby view a «live» demonstration of the work in progress. Objective: to promote a direct relationship to the works under restoration and to the problems of safeguarding the cultural heritage.

* 1994, Masada, Israel, Western Palace, conservation *in situ* of mosaic pavements: thousands of visitors view the work in progress by means of aerial gangways. Objective: to transmit to the general public the idea that monuments are perishable and require constant care. (Fig.)

* 1994–1995, Zippori, Israel, the building with the Nile mosaic: a terrace

over the site allows the public to watch the work «live» and to ask the restorers questions. Objective: to inform the public on the subjects of conservation *in situ* of the mosaic, its maintenance, and the necessity to preserve the historical message of the monuments.

Public response has exceeded all expectations: long lines have formed under the scaffolding, guided tours have been requested for school groups, and many people have returned periodically to follow the evolution of the work. A precise measurement of public response has come to us from a questionnaire distributed during the conservation of the atrium of the Capitoline Museum. This was a restoration in which informing and increasing the awareness of the public were considered important objectives from the very start of the project: a painting was installed, seven meters high, reproducing the inside façade of the portico of the atrium, with its arches and statues and with the outlines of restorers at work and of visitors, in order to simulate a closed workshop; but instead of being a separation, it served as a means of reference and communication with the public. In order to exploit the full potential of the project, several initiatives were organized: guided tours by the restorers in three languages, didactic panels, a video, and a questionnaire on the subject of the conservation of artistic patrimony. The questionnaire was distributed in four languages in front of a statue that had been deliberately left unrestored in order to allow the public to understand the state of conservation of the collection before treatment. Five different questionnaires were prepared: the text, with only two questions, changed every day, and the answers to the previous questions were displayed in succession. Particularly stimulating for the public was the idea of being able to compare, from one day to the next, the answers to the queries of the previous days. An average of 150 visitors answered each day, for a total of 750 persons. 71% believe that the principal aim of a restoration is to conserve the work of art, while only 18% believe that restoration aids in the comprehension of the work. 69% state that their own interest in ancient sculpture was stimulated after seeing the restored statues. 91% maintain that to carry out the restoration without closing the site to the public is informative and should be encouraged. 79% believe that the further deterioration of the sculptures will be arrested only if there is main-



tenance after the restoration. Finally, 84% of the visitors are willing to dedicate 30 minutes to a visit to a restoration workshop, out of the 60 minutes necessary to visit a museum.

For us, these results confirm the validity of the initiatives dedicated to the public, but, at the same time, they teach us that opening a restoration to visitors is not something to be improvised, and even less does it mean simply to allow the public physical access to the site. If this were so, the risks and responsibilities would be numerous and would fall completely on the conservators who had had the idea. This is reflected in the criticism often expressed by certain restorers with regard to these initiatives: they maintain that restoration is not entertainment and that restorers do not want to feel like animals in a cage. One might argue that this point of view is not widespread in the profession and that it reflects a passive attitude on the part of the few restorers who limit the importance of the conservation treatment solely to its technical dimension. Instead, the conservation treatment is above all study, research, and understanding; likewise, communication and information are part of the direct evolution of a single process. The relationship with the public must be active, it must be managed rather than endured. But obviously the operation requires careful planning in every detail, to eliminate all the risks and reduce to a minimum the impact that the initiative will have on the conservator at work. The spaces should be organized in such a way that their uses and equipment do not interfere with tour itineraries. These, in turn, must be planned to take into account the physical safety of the visitors and of the work. The worksite must always be kept in order and in perfect efficiency, but this, like the aforementioned need for planning, is a welcome obligation where everyday practices and human weakness could lead to distractions. The public should be made to feel welcome by didactic aids, such as illustrative panels, a video, a guided tour, in such a way that the visitor is slowly introduced to the subject matter of the restoration, thus restricting the need for dialogue with the restorers to a few specific questions. In the atrium of the Capitoline Museum one conservator each day, in rotation, had the task of receiving the public and answering questions; in Zippori the tourist guides were constantly brought up to date about the progress of the work, and thus they functioned as a cushion between the public and the conservators.

An extremely positive side effect of these initiatives in the general economy of the work is the increased level of involvement of the conservators in the project: they feel themselves to be an active part of a program with a direct relationship to the public, and they keep themselves constantly informed about the progress of the entire project. The daily routine of the technical treatment is continually regenerated (gratified and criticized) by the dialectic with the external observer. All this translates into less stress for the worker and higher quality of the work. But the positive features do not end there. One should not underestimate the value to the conservator of the necessity to respond to a variety of questions and thus to keep everything under discussion, nor the value of suggestions and criticisms from people who come from outside and whose minds are free from preconceptions. The response of children has been very positive, as has been shown by the large number of guided tours requested by the schools. This, in particular, is a field which we intend to enlarge in future programs, by preparing didactic materials designed to entertain and at the same time to stimulate curiosity and to transmit the message.

When the public responds, so do the media: the press has always reported these programs with great enthusiasm, helping to amplify the effects of the initiatives; thus one should cite, among the positive results of the operation, the possibility of collecting a clipping file, which, as everyone knows, is always useful.

As to the risk of distracting the public from the «traditional» visit, as has sometimes been lamented, there is no remedy: if a visitor chooses to dedicate part of his time to the restoration site, it is because he judges, of his own free will, that it offers him something interesting or unusual. So much the better to transmit to the public a dynamic vision of the the museum or archaeological site, in which «new» things may happen and to which it is worthwhile to come back again.

Underlying the enterprise of informing visitors is the consideration that every time the public is involved, the results are positive, in both the short and the long term: in the short term, with a large participation in the initiative; in the long term, with an increased awareness on the subject of conservation. Thus if we believe that the protection of the cultural heritage must be obtained through systems of prevention, then the raising of public awareness is a key element: it will be the citizens themselves who, one day, will

feel themselves to be participants in the responsibility and pleasure of protecting the cultural heritage.

In conclusion, we may say that, on balance, our experiences in this field are decidedly positive and we will certainly continue on this road, and this article is intended, in turn, as a sign of encouragement for more and more initiatives of this type.

C.C.A., Centro di Conservazione Archeologica, is a private company, founded in 1982, undertaking public commitments in Italy and in other countries in the field of conservation of ancient monuments and archaeological sites and materials.

Les enfants peuvent aussi contribuer à la sauvegarde des œuvres d'art

Giuseppe Basile

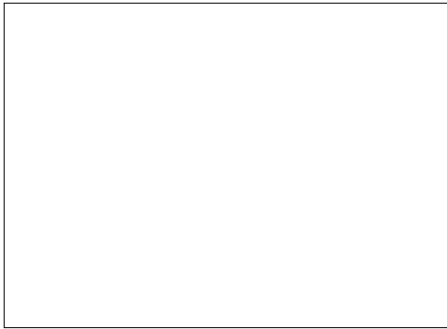
Institut Central de Restauration, Rome

Abstract

Children make up a good proportion of museum visitors and educational programmes are often specially designed for them. But although these programmes provide a wide range of information, only rarely do they include anything on conservation and restoration. This article shows how childrens' perceptions can change if they are told about conservation aspects during their visit.

Pour assurer la sauvegarde de notre patrimoine culturel, il faut un effort de la part de tout le monde.

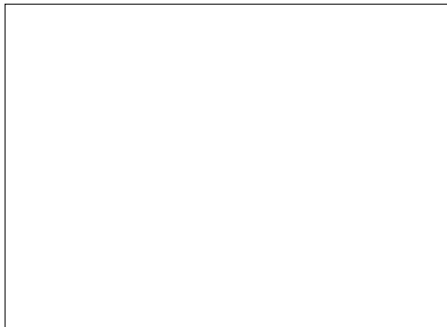
En effet, devant l'ampleur de la tâche, ceux dont la fonction est de sauvegarder les biens culturels, malgré toute leur bonne volonté, ne pourraient jamais y arriver seuls. Il faut impliquer le plus de gens possible et les informer de ce qu'il convient de faire pour atteindre l'objectif. Il ne suffit pas d'expliquer lors de visites guidées que les oeuvres d'art et les monuments au milieu desquels nous nous trouvons sont importants parce que ce sont des témoignages de notre passé et qu'il faut donc les respecter. Il faut aussi faire comprendre leur fragilité. Il est très rare que l'on sache à quel point les oeuvres antiques sont fragiles, même si elles ont l'air extrêmement résistantes. C'est également la faute de ceux qui continuent à parler de l'éternité des oeuvres d'art et des monuments en



Le groupe A entrain dans la salle où se trouvait la statue en fin de restauration et il leur était demandé de faire un dessin en souvenir de la visite. Il en résultait des dessins "artistiques" représentant le mieux possible soit la statue dans son ensemble, soit un détail: tête, jambe du cavalier ou du cheval.

cal monuments in Rome after restoration work was completed.

Une maxime bien connue de John Ruskin dit: «Ayez soin de vos monuments et vous n'aurez pas besoin de les restaurer: une feuille de plomb remplacée sur la toiture, un bon curetage de la gouttière pourront sauver le toit et le mur». Ceci est rarement mis en pratique. En réalité, on constate tous les jours que l'abandon des mesures de prévention et d'entretien a entraîné une situation d'une telle gravité pour l'état de conservation des monuments anciens, qu'il est impossible de mettre en oeuvre un programme d'entretien sans auparavant réaliser une intervention complète de restauration. Ceci a été le cas à Rome: entre 1982 et 1988, une loi spéciale (dite 'Biasini', d'après le nom du Ministre qui l'a proposée) a mis à la disposition de la Surintendance Archéologique de Rome des ressources financières extraordinaires afin d'intervenir sur les principaux monuments en marbre de l'âge classique. Il a été ainsi possible de restaurer plus de dix monuments, entre autres les deux colonnes coelides de Trajan et de Marc Aurèle, les arcs de Septime Sévère et de Constantin, les temples de Saturne, de Castor et Pollux, de Vespasien, la colonne de Phocas ainsi que le temple d'Hadrien.



oubliant d'ajouter que cette éternité idéale cesse automatiquement si la cohérence des matériaux qui constituent l'oeuvre vient à manquer.

La perception de ce phénomène n'est pas immédiate et exige en outre des connaissances d'ordre technique et scientifique que tout le monde ne possède pas. Il est par conséquent difficile pour l'homme de la rue d'associer l'idée de fragilité aux matériaux considérés comme solides par excellence, la pierre et le métal, qui ne le sont en réalité que tant qu'ils sont encore en bon état.

Or, il suffirait d'expliquer au public et, en particulier, aux enfants qu'il est exceptionnel qu'un objet ancien ait une résistance identique à celle qu'il avait lorsqu'il était neuf, pour s'en faire des alliés précieux au moment où il faut coordonner les efforts en vue de sauvegarder des collections.

Dans ce sens, une expérience a été tentée à l'occasion de l'exposition de la statue équestre de l'empereur Marc Aurèle (¹) après une intervention de restauration qui dura huit ans.

Pour réaliser ce travail, la statue située au centre de la place du Capitole avait été déplacée à l'Institut central de restauration (ICR).

Des classes d'enfants de 9 à 13 ans furent invitées. Il leur était présenté l'histoire de Marc Aurèle, comment l'identité du cavalier avait été prouvée, comment pendant 17 siècles la statue avait été déplacée pour orner différentes places romaines. À ce moment-là, la classe était divisée en deux groupes A et B.

Le groupe B était alors à son tour mis en présence de la statue et en quelques minutes son état préoccupant était exposé. Il était demandé aux enfants de découvrir les trous (plus de 2000) qui avaient été comblés durant une intervention précédente. Les problèmes de conservation, dus au fait que la statue était placée alors dans une zone de pollution élevée, étaient évoqués. Puis, comme au groupe A, il était demandé de faire un dessin en souvenir de la visite.

Tous les dessins évoquaient les problèmes de sauvegarde et beaucoup proposaient des solutions comme celle de mettre la statue sous cloche si elle était présentée à l'extérieur ou dans un musée (voir photos 1 et 2).

Sans aucun doute dans le futur les enfants de ce groupe apporteront leur appui aux campagnes de sauvegarde des oeuvres d'art.

¹ C'est le seul exemple survivant des 25 statues monumentales de ce type ayant orné la Rome antique.

L'entretien régulier des monuments anciens et des collections: de la théorie à la mise en pratique?

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Abstract

This article encourages museum directors to launch maintenance programmes which are a key element of preventive conservation. An example is given of a plan initiated in 1994 for the regular maintenance of archaeological

Au début, il y a eu quelques incertitudes, tout à fait compréhensibles devant une tâche si lourde à laquelle personne au cours de ce siècle n'avait dû faire face. Bientôt la nécessité d'une direction scientifique coordonnée apparut clairement: il était en effet nécessaire de ne pas perdre de vue la spécificité de chaque monument, mais, en même temps, d'assurer l'unité des critères et des approches scientifiques. Cette tâche fut confiée à l'Institut central de restauration, la responsabilité revenant à l'auteur de ces lignes. De cette façon, il a été possible, non seulement au niveau des intentions et des documents, mais aussi dans la réalité quotidienne du chantier, de donner la même importance à la recherche historique et au diagnostic de laboratoire. D'importantes découvertes ont été faites sur les «patines à oxalates», dont certaines ont été reconnues comme traces et témoins de l'ancienne manière de soigner et d'entretenir les monuments, grâce à laquelle les anciens marbres ont pu garder jusqu'à nos jours une partie appréciable de leurs qualités matérielles et formelles. Le problème se posant avec force et en présence d'opinions diverses, il fut décidé de ne pas éliminer ces patines

au cours des nettoyages, mais au contraire de choisir des traitements compatibles avec leur présence sur les anciennes surfaces. Ceci a déterminé le choix de produits inorganiques aussi bien pour les pré-consolidations (à la chaux ou dans les conditions les plus graves avec du silicate d'éthyle) que pour la réintégration des lacunes au mortier de chaux. Un monument en particulier, l'arc de Septime Sévère, a été traité exclusivement par des techniques à la chaux, même pour la pré-consolidation. Quant à la colonne de Marc Aurèle, c'est le seul monument qui ait reçu un film de protection (280L) à cause de la condition de désagrégation du marbre et de son emplacement dans un milieu urbain à très forte pollution.

Le choix de la chaux trouvait son origine dans le principe de l'«intervention minimum». Cette approche nouvelle n'était pas acceptée par tous les spécialistes. Les matériaux traditionnels employés pouvant avoir une durabilité limitée, il fut donc décidé d'effectuer, tous les cinq ans, une campagne de contrôle et d'entretien.

À partir de 1990, l'ICR a essayé de trouver les ressources nécessaires pour réaliser ce programme, mais un financement inférieur aux besoins fut seulement débloqué en 1994.

Étant donc dans l'impossibilité de réaliser le programme complet, il a fallu procéder par échantillons: les monuments choisis ont été les deux colonnes coclides, la colonne de Phocas, les arcs de Constantin et de Septime Sévère. Pour l'inspection des monuments on a employé un élévateur à bras extensibles. De sa plate-forme, il est possible d'examiner les surfaces des zones considérées les plus à risque et de comparer la situation présente avec la documentation détaillée mise au point au cours des interventions antérieures.

La deuxième démarche consista à réaliser des interventions sélectives pour l'élimination des dépôts charbonneux et dans les zones où les réintégrations au mortier de chaux étaient affaiblies.

La campagne va bientôt s'achever. À ce stade, l'état des monuments soumis au contrôle est jugé satisfaisant, mais on a l'impression que l'on en est au point critique et que la période de cinq ans entre deux contrôles ne devrait jamais être dépassée, surtout si l'on veut empêcher l'incrustation de dépôts de particules charbonneuses: leur présence est signalée sur toutes les surfaces et il commence à être difficile de

les éliminer par l'air comprimé ou à la brosse.

Dès la fin de la campagne, un rapport complet sera remis à la Surintendance évaluant la vitesse de détérioration et proposant un plan d'entretien du monument incluant les procédés, le temps, le coût. Ceci permettra aux administrateurs de programmer les interventions futures et de réduire les coûts tout en assurant la sauvegarde du monument.

Il ne reste qu'à souhaiter que cette expérience soit profitable pour rendre plus proche le moment où l'intervention préventive et les programmes d'entretien du patrimoine immobilier comme mobilier deviendront monnaie courante dans la profession.

Emergency Preparedness, Large-scale Problems and Solutions: News from the Front Lines

Barbara Roberts and
Janet Bridgland
Consultants

Résumé

Durant ces deux dernières années, le patrimoine culturel mondial a subi d'importantes pertes provoquées par des catastrophes naturelles et par la guerre. L'ICOM s'est montré actif sur plusieurs plans. Des membres du Comité de conservation ont fait un rapport sur l'état des collections de la République de Croatie et ont aussi aidé leurs collègues japonais après le dévastateur tremblement de terre à Kobé. Il est clair qu'un lieu de centralisation doit être créé pour coordonner, rassembler et diffuser les informations tels les nombreux plans en cas d'urgence et les manuels d'intervention. Une formation adéquate est nécessaire pour les volontaires qui aident à protéger le patrimoine culturel en cas de catastrophe nationale. Une politique publique concertée, basée sur la préparation contre toute éventualité, sur la réduction des risques et sur des techniques d'intervention bien pratiquées, devrait constituer la base des efforts à fournir

durant les quatre dernières années de la *Décennie internationale pour la Réduction des Catastrophes naturelles*.

War, civil strife, volcanic eruptions, flood, fires, brushfires, earthquakes, hurricanes, theft, illicit traffic and terrorist activity have, amongst other disasters, taken a heavy toll on cultural property in the last two years, indeed, in the first two months of 1995.

How is the conservation community responding and contributing to the growing need for: 1) a coordinated hazard mitigation approach, and 2) dare we say it, the debate on national and international policies, goals and strategies that is required if we are to protect and preserve cultural property from disastrous situations?

There is positive news. ICOM members have reviewed and reported on the condition of collections in the Republic of Croatia and viewed the remaining collections from the destroyed Vukovar museums, now held in Serbia. The Council of Europe publishes regular reports on the appalling destruction taking place in Bosnia Herzegovina. The problem is that there is little or no response to requests for assistance, transport vehicles, funding and conservation supplies.

ICOM News regularly publishes information on stolen works of art. The recovery rate is improving, but the incidents of theft are rising rapidly and law enforcement professionals cannot keep pace with the demands placed upon them. The need for good basic inventories and photographic records, and ways to uniquely identify collections holdings are the subject of a study by the Getty Conservation Institute and the Getty Art History Information Program. An international survey has been conducted and ICOM's International Committee for Documentation (CIDOC) is being regularly informed of progress. Proper documentation of collections is essential when dealing with the aftermath of a disaster, whether in determining priorities for the salvage process or in tracking items that have been removed during armed conflict. A presentation on these and related issues is proposed for the 1996 Triennial Meeting of the ICOM Conservation Committee in Edinburgh.

A coordinated response was mounted in the USA by the National Institute for the Conservation of Cultural Property and the American Institute for Conservation of Historic and Artistic Works to the institutions that were devastated

by the flooding of the Mississippi River in 1993 and by the California rains in early 1995. A major advance in the USA has been the addition of three words by the Federal Emergency Management Agency to its mandate for recovery measures: «and cultural property». This has opened a very important door for federal assistance to cultural property institutions in the event of a major disaster. An «Emergency Summit» was held in Washington, D.C. in December 1994 where representatives from many of the cultural organizations and agencies were brought together to discuss future collaboration and response mechanisms. (1)

Two members of the ICOM Committee for Conservation were invited to join a group of Japanese museum professionals to view the damage to cultural property in Kobe, Japan in early February following the magnitude 6.9 earthquake of January 17. Buildings, showcases and collections both on display and in storage sustained damage ranging from minor to major. An estimated 50 percent of Kobe's buildings comprising more than 20,000 structures were ruined and although the damage to collections observed was «proportionally» small compared to the total devastation witnessed, loss was nevertheless considerable. There was a broad-based exchange of information on recovery measures and on seismic mitigation strategies to prevent losses in future earthquakes. ICOM members from the United Kingdom, Canada and the USA have also supplied written information to the Tokyo National Research Institute for Cultural Properties to be disseminated to the affected region. A central coordinating committee has been established by the *Bunkacho* (the Japanese Ministry of Culture).

Huge areas of Europe were seriously affected by flooding in early 1995. The news from the Netherlands is that the major dikes held and that the majority of collections are safe. Mitigation procedures were followed and objects were moved to upper floors. Information on collections in other countries is still sketchy as of the time of writing.

The United Nations' International Decade for Natural Disaster Reduction has another four years to run. There is greater awareness. A growing number of institutions are taking their future into their own hands and are planning and training for emergency events. ICOM, UNESCO and ICOMOS are discussing the need for a central clearinghouse for disseminating informa-

tion on hazard mitigation procedures, reporting emergency events and their effect on cultural property and for obtaining assistance with recovery, but funding is not forthcoming at present.

There is a healthy and growing body of written emergency plans. There are recovery manuals in print or about to go to press. We await with anticipation the 1995 publication from the United Kingdom Institute for Conservation on recovery of works of art, with particular emphasis on fire and flood. (2) The US Maritime museums have collaborated to produce a planning and recovery manual that will be available later this year. «Steal This Handbook», a 1994 publication of the Southeastern Registrars' Association is particularly informative. (3)

In short, there is now momentum for action, and information is being added to the reference material already available.

There is a clear need for a central point to coordinate, gather and disseminate information. The most appropriate way to begin would be to set up a mechanism at the national level in each country which could feed into a central non-governmental headquarters. There is always a window of opportunity for assisting with a major calamity. There is a great will to «do something to help», particularly among ICOM members, but that opportunity decreases with each day after a disaster has struck and the number of problems requiring the attention of the small community of cultural property professionals is truly staggering.

As professionals, we must be more forthright in training the public and the host of volunteers who are the mainstay in efforts to protect and preserve the national cultural heritage in times of national emergency. Publications, seminars and awareness, in tandem with a coordinated public policy based on preparedness, hazard mitigation procedures and well-practiced recovery techniques should form the basis for our last four years of this International Decade and of the 20th century.

References

1. For information contact: National Institute for Conservation (NIC), 3299 K Street N.W., Suite 602, Washington, D.C. 20007, USA.
2. United Kingdom Institute for Conservation (UKIC), 57 Upper Addison Gardens, London W1H 8AJ, United Kingdom.
3. c/o South Carolina State Museum, P.O. Box 100107, Columbia, SC 29202-5107, USA. Price US\$20.

Living with Deadlines

Jonathan Ashley-Smith

Head of Conservation, Victoria and Albert Museum, London

Résumé

Pour la préparation d'une exposition temporaire et pour une nouvelle présentation des collections permanentes, le conservateur doit faire preuve d'un sens de l'esthétique et de compétences manuelles. Une connaissance de la muséologie et des qualités de diplomate et de négociateur lui sont nécessaires pour déterminer les paramètres environnementaux appropriés lors de prêt ou d'emprunts d'œuvres. Le restaurateur doit aussi posséder des compétences en matière d'organisation pour fixer les priorités d'intervention et mettre au point des programmes de travail qui concilient plaisir et enrichissement personnel tout en respectant les buts fixés et le temps imparti.

At the beginning of all V&A planning documents is the declaration that the Museum exists to increase the understanding and enjoyment of art, craft and design through its collections. The Trustees of the Museum are bound by Act of Parliament to preserve the collections as well as make them available for the education and diversion of the public. Thus we have the familiar dilemma that most methods of increasing access to the collections also decrease the probability of them being preserved unchanged.

There are a number of different possible methods of increasing understanding and enjoyment, but the dominant approach is to increase the number of people that can be encouraged to come physically close to the objects. The people can come to see the object in the Museum, or the object can travel elsewhere to be seen by a different group of people.

Without changing what the Museum has to offer, the number of visitors can be increased somewhat by outreach programmes and by marketing. However, significant increases in visitor numbers result from new interpretations and fresh displays. These can be re-displays of the permanent collections in re-furnished galleries, temporary exhibitions that may contain mixtures of V&A objects and material borrowed from elsewhere, or

changing displays of light-sensitive material from the reference collections. Significant increases in numbers of viewers come from changing the location of the object. The V&A is involved in sending travelling exhibitions, each consisting of 100-200 objects, to a variety of venues in the Far East and the United States.

As a result of all this activity the V&A is very much a living museum, but for the people concerned with the physical welfare of the collections it means organising concurrent programmes that may have conflicting priorities and the stress of constantly living with deadlines.

New Galleries

In the ideal situation, the planning of a new gallery will start several years before the proposed opening. As the proposal takes shape, conservation staff will be involved in monitoring the environment and discussing with designers and engineers what alterations are desirable and what can be achieved within the available budget. The condition of the objects will be assessed and a programme of treatment organised. The treatment of some large textile objects may take several years. The mounting of objects for display may involve advice or action from conservators. The proper mounting of costume is an essential part of preventive conservation.

Where the advice on environment and display and the treatment programme schedules are realistic, given the constraints of budget and time, the designers and curators develop trust in the professional expertise of the con-

servator and a good working relationship can develop. If there is also an appreciation that there are other projects competing for the time and expertise of the conservator, there is less last minute changing of objects for display and the ideal situation is nearly achievable.

In recent years one conservator has been designated the liaison officer for a particular gallery project. It is that person's responsibility to ensure that the project organisers have consulted the conservation scientists about environmental monitoring and testing materials for suitability for long-term display. This conservator is also responsible for keeping the curator informed about any problems with the treatment schedule. This becomes very important when there are a number of different conservation specialisms involved in one project, and especially where objects containing several media have to be dealt with by more than one studio, as with metal mounts on furniture.

Conservators have been more motivated, and had a greater understanding of the problems of other groups servicing the same project, when the curator has taken time to explain the nature of the whole project to conservation staff and they have had a chance to ask questions and air views.

A good example of this long-term planning, with a fair degree of understanding among the participants and a reasonable degree of success, was the new Glass Gallery which opened in April 1994 and involved the assessment and treatment of some 6,000 objects.

In-House Exhibitions.

Textiles and works on paper are not usually displayed permanently because of the risk of damage by light. The Nehru Gallery of Indian Art relies on quantities of light-sensitive material such as costume and miniature painting to relay its message. Every eighteen months a new selection of items of paper and textiles from the Indian and South East Asian Collection is treated, mounted and displayed. Similarly, there are changing displays of objects from the collections of prints, drawings and photographs.

The V&A has recently opened a large and flexible space that can accommodate exhibitions that are organised in-house or bought in from outside. When the Museum is borrowing from other institutions there are several

problems that take up Conservation time.

The lender may specify very tight conditions for the temperature and relative humidity of the display space. Our own experience and recent scientific research has shown that there is never any justification for specifying a narrower band for relative humidity than $\pm 5\%$ RH, there will be many instances where $\pm 10\%$ is quite safe. However, if the lender is unmoved by the reality of the tolerance of many objects to fluctuations around the mid-range of humidity, we have to try to provide microclimates that we know will be more stable than the exhibition space. In addition we then have to monitor the conditions in a number of different microclimates and keep the lender informed of the constancy of the environment. To save on staff time we have developed systems of radio-telemetry that relay the information from a number of sensors to one collection point where it can be collated and converted into relevant reports.

All objects coming into the Museum have to be checked for condition. This is relatively easy if they come from an institution where there are conservators who have assessed that the object is fit to travel and have supplied their own condition report. However if the exhibit comes from a church, or a historic house, where there is no curatorial or conservation support, there will be additional work in creating a report from scratch and there will almost certainly be problems of support and consolidation. Such places are generally cool and maintain very high humidities throughout the year. There is a high risk of environmental damage as the object suffers a large moisture-content change on going from the cool damp church to the warm and relatively dry museum. The V&A is trying to avoid this risk by the use of questionnaires to help the lender assess the object's condition and its ambient atmosphere. In some cases conservation staff will travel to take measurements of moisture content of objects proposed for loan.

Travelling Exhibitions

When the Museum acts as lender, it specifies quite broad and realistic parameters for environment. However, experience has shown that borrowers are not always able to meet even these reasonable demands. If it is desirable to send sensitive objects, such as paintings on wooden panels, these are sent in their own microclimate cases.

At the borrower's expense these can be faced with low reflecting glass, and can often be fitted into the existing frames, so the protective measures are quite unobtrusive.

A large travelling exhibition needs the same degree of organisation as a new permanent gallery and we have found it useful to appoint a co-ordinating conservator. There are additional problems in assessment and treatment and mounting. The objects will have to be unpacked, mounted for display, unmounted and repacked several times, not always by the person who devised the packaging or the mounting method. Everything must be simple, reversible and fool-proof. Time is taken to train couriers about potential problems with condition and handling.

And everything else

All the projects mentioned so far are carried out to deadlines that, although subject to the whim of funding through sponsorship and Government grant schemes, are more or less controllable and agreed within the Museum. In addition, the Conservation Department undertakes preventive, first aid and *ad hoc* treatment of the collections dictated by the rate of deterioration of the different media. We are also involved in the post-graduate training of conservators and conservation scientists which is subject to the timetable of the academic term.

The fundamental research that is necessary to maintain the confidence that we are doing the right thing, is largely sponsored from outside the Museum.

We are currently involved in a European Union funded three year study of pollutants in show-cases and galleries in partnership with institutions in Germany and Portugal. The search for partners and the preparation and submission of proposals for research funding bring their own separate deadlines.

There is an undeniable excitement that comes from working to agreed objectives within a tight schedule but there are times when it is advisable to pause and draw breath

La restauration depuis 1945. Naissance, développement et problèmes d'une discipline

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Abstract

During the years immediately following the second World War, the then rather limited world of conservation specialists in industrial countries enjoyed a considerable impulse which led, through interdisciplinarity and international contacts, to the development of a modern methodology of conservation as a specific activity, and later to the elaboration of teaching curricula aimed at training the younger generation on a sound critical and scientific base. From the end of the sixties however, the very success of this movement and a generalized infatuation for conservation in the consumer society soon developed undesired effects and created problems of a new type, one of the most serious of which being that of the status of conservators.

Les premières décennies suivant la deuxième guerre mondiale ont vu, dans les principaux pays industrialisés, un développement significatif de la restauration. Dans le monde encore restreint des spécialistes impliqués s'unissait alors à l'urgence et à l'ampleur des problèmes pratiques nés du conflit, le développement d'une conscience de plus en plus précise et exigeante du caractère spécifique de la restauration comme discipline particulière. Se fondant sur des prémices esquissées dès avant la guerre, une conception nouvelle s'imposait, exigeant de dépasser l'activité essentiellement artisanale du technicien traditionnel en impliquant le concours des sciences exactes dans la connaissance des matériaux et de leurs causes d'altération comme dans la mise au point des remèdes, et un engagement personnel des responsables des collections auxquels incombait, en leur qualité d'historiens de l'art ou d'archéologues, de reconnaître les valeurs esthétiques et historiques en cause et de veiller à ce que la démarche technique de la restauration

réponde aux exigences critiques qui la justifiaient.

En même temps, le besoin de rétablir l'échange international des expériences interrompu par les années de conflit se faisait brusquement plus pressant et entraînait, avec la création de l'UNESCO et de l'ICOM, l'organisation de rencontres internationales, lieux de larges débats d'idées. L'un des premiers de ceux-ci devait être la Commission de l'ICOM pour le traitement des peintures – qui, toutefois, ne réunissait au départ que des conservateurs de musée, à l'exclusion des restaurateurs. Les laboratoires de musées, dont le nombre s'accroissait rapidement, ne tardent pas à constituer un Comité de l'ICOM pour les Laboratoires, où se retrouvent périodiquement les scientifiques. Très rapidement cependant, la discussion même des problèmes soulevés par ces assemblées devait faire apparaître la nécessité de réunir, en une même organisation, et sur un pied de parfaite égalité, tous les spécialistes impliqués par la conservation. De sorte qu'en 1965 s'opérait la fusion de la Commission de l'ICOM pour le Traitement des peintures et du Comité de l'ICOM pour les Laboratoires de musées en un Comité international de l'ICOM pour la conservation, qui s'ouvrait également aux conservateurs de musée, aux scientifiques et aux restaurateurs, et se fixait pour but de favoriser leur collaboration au sein de groupes de travail interdisciplinaires et internationaux.

Entretemps, la méthodologie critique de la restauration s'affinait au contact des expériences et à travers divers débats, et trouvait sa formulation la plus rigoureuse dans l'oeuvre de Cesare Brandi, tandis que l'exploitation des méthodes scientifiques d'examen mises au point par les laboratoires au profit de l'historien de l'art permettait de renouveler certaines approches et notamment de cerner de plus en plus près les modalités d'exécution des oeuvres. D'autre part, divers domaines longtemps considérés comme mineurs, tels que ceux des sculptures polychromes ou des peintures murales, étaient enfin abordés selon des principes méthodologiques aussi rigoureux que ceux réservés le plus souvent aux seules peintures de chevalet.

Cette rapide évolution, fruit d'un vaste effort d'intégration des diverses disciplines au profit de la restauration était le fait d'un petit nombre d'historiens de l'art ou archéologues ouverts aux problèmes techniques, de scienti-

fiques généralistes qui souvent joignaient la pratique de la restauration aux travaux d'analyse et de recherche, et de restaurateurs éclairés, conscients de la nécessité de dépasser l'empirisme d'une tradition de pratique artisanale. Mais ce qui n'était là que le fruit de collaborations personnelles ne pouvait évidemment être généralisé et transmis à l'avenir que par la mise au point et la réalisation d'un programme de formation rigoureuse des restaurateurs qui leur permette d'intégrer la pratique artisanale dans un ensemble de connaissances scientifiques et par une formation historique et critique à la hauteur de leurs responsabilités.

Les premières écoles de restauration mises en place sur ces bases devaient préparer de nouvelles générations de restaurateurs armés pour un dialogue constructif et pleinement qualifiés pour exercer les responsabilités qui leur incombent nécessairement en tant que seuls à intervenir effectivement sur l'oeuvre d'art.

Si la restauration est ainsi devenue une discipline *sui generis* où le restaurateur exerce, comme l'historien conservateur et le scientifique, une responsabilité culturelle vis-à-vis du patrimoine dont il assure la sauvegarde, l'évolution que nous avons esquissée ne se réalise cependant pleinement que dans ce que l'on pourrait appeler les centres d'excellence et les réalisations de pointe, où le souci croissant de mieux respecter l'authenticité des objets traités conduit par ailleurs à une politique d'intervention de plus en plus restrictive et préventive.

Ces progrès indéniables ne sont cependant pas sans avoir suscité certains effets pervers, et depuis la fin des années 60 environ se sont développés de nouveaux facteurs, qui ont quelque peu modifié le contexte général de la restauration et posent aujourd'hui de nouveaux problèmes. Le développement généralisé des échanges a entraîné une multiplication des expositions – facilitées, voire encouragées, par les progrès mêmes de la climatisation et des conditions de transport – qui soumettent les oeuvres d'art aux risques accrus d'une consommation accélérée. S'il est vrai qu'une exposition peut offrir l'occasion du financement de restaurations nécessaires, il n'est pas rare qu'en revanche, elle pousse à infléchir une saine politique de conservation des collections sous la pression de considérations qui lui sont étrangères.

D'autre part, la sensibilisation même du public à la restauration – démarche combien estimable et justifiée – a suscité pour celle-ci un intérêt croissant, qui pourtant ne s'accompagne pas nécessairement d'un développement de la compétence à en juger. Devenue mode, la restauration se voit de plus en plus exposée aux pressions d'une opinion qui n'est pas forcément éclairée. Une forme particulièrement dangereuse de concession à ce genre de pression s'est manifestée lorsque le travail des restaurateurs a été exposé en spectacle pour satisfaire la curiosité du public. Que devient, en effet, dans une telle mise en scène, le respect de la responsabilité du restaurateur, de la concentration qu'exige de toute évidence la nature délicate de son travail? Imagine-t-on un seul instant que l'on puisse soumettre un chirurgien ou un chercheur en laboratoire à de telles conditions?

La restauration fascine parce qu'elle crée l'événement. Elle «rend à l'oeuvre sa fraîcheur primitive», comme nous le dit bien naïvement la majorité de la presse quotidienne, accréditant ainsi la vision la plus dangereuse de la discipline. Bien qu'il tienne entre ses mains la survie de l'oeuvre dans son authenticité, le restaurateur est encore couramment vu comme un exécutant – un représentant des arts mécaniques au sein des arts libéraux – et dans aucun pays semble-t-il, malgré sa responsabilité évidente, sa formation et sa profession ne sont à ce jour réglementées, sa compétence garantie, reconnue et défendue par un statut. Même si les organisations officielles connaissent généralement des procédures d'agrégation, il n'en reste pas moins que quiconque peut s'improviser restaurateur. De ce fait, trop d'enseignements ont pu être créés au cours des dernières décennies sans disposer d'un encadrement pédagogique adéquat et sans programme suffisant. De sorte qu'en l'absence de réglementation légale, c'est souvent la profession elle-même qui a réagi, par l'intermédiaire d'associations nationales et internationales, pour tenter d'assurer un certain niveau de qualité. Or, la mise en place d'une telle réglementation légale n'est pas seulement une garantie indispensable de la protection du patrimoine contre l'intervention d'opérateurs insuffisamment préparés, c'est aussi, par l'établissement d'un statut adéquat, la condition d'un dialogue constructif du restaurateur avec ses partenaires: le conservateur de musée et le scientifique de laboratoire, lesquels doivent, à leur tour, être instruits des éléments criti-

ques et technologiques nécessaires à cette collaboration.

Aussi les progrès futurs de la restauration dépendent-ils généralement moins aujourd'hui des améliorations techniques, qui en tout état de cause se poursuivent désormais régulièrement, que de ces conditions générales d'exercice de la discipline qui se situent bien en amont des problèmes techniques, et relèvent de la politique culturelle.

Technical Studies and the Field of Conservation

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Résumé

Depuis la découverte des rayons-x par Roentgen en 1895, les techniques de laboratoire sont devenues des instruments indispensables pour un examen approfondi des oeuvres d'art. Les premiers laboratoires consacrés aux investigations scientifiques ont été fondés en Europe: le Forschungslabor à Berlin créé en 1881 et le laboratoire du British Museum en 1921.

L'interdisciplinarité entre historiens de l'art, restaurateurs et scientifiques est très importante pour la recherche sur les techniques picturales et les matériaux des peintures.

La radiographie et l'examen au microscope restent fondamentaux même si, aujourd'hui, il existe des techniques plus élaborées comme la chromatographie gazeuse, la spectrométrie de masse (GC-MS) et l'autoradiographie. Cette dernière permet, par exemple, d'observer la structure interne de la peinture tandis que la réflectographie à l'infrarouge, découverte par le physicien hollandais van Asperen de Boer, révèle le dessin sous-jacent.

Le développement des techniques non destructives se poursuit. Les images sur CD-Rom permettent une plus grande distribution d'informations aux chercheurs. L'emploi de l'ordinateur et le traitement des images facilitent la manutention et la lecture des documents.

Since Roentgen's discovery of x-rays in 1895 in Wurzburg, laboratory methods have had a significant impact on the examination of works of art. For the conservator, the information that technical studies yields is important for a

complete view of the condition of a work of art in order to choose the proper treatment. Art historical research is enriched by the addition of stylistic and technical information hidden beneath the surface of a work of art.

The first laboratories devoted to the scientific examination of works of art began in museums in Europe and brought together specialists in conservation, science and art history. The Forschungslabor, established in 1881 in Berlin, was the first museum laboratory. The British Museum laboratory followed in 1921. The first laboratory in the United States opened in 1929 at the Boston Museum of Fine Arts. The museum laboratory setting was an important step towards collaborating and establishing a framework for interdisciplinary research.

Technical studies were first used to authenticate works of art. Famous cases, such as Hans van Meegeren in Holland who forged paintings by Vermeer, brought to public attention the role technical examination could play in uncovering fakes.

Dating is also an important part of authentication and radiocarbon dating has been used for decades on archaeological material. Yet, the dating of paintings remains problematic. No single technique can accurately date a painting. However, scientists still hope to find a technique to date paintings within a range that complements stylistic analysis.

The laboratory setting provided the framework for collaborative research among scientists, conservators and historians. Scientific techniques uncover the condition of a work of art and provide vital information to the conservator when deciding on treatment. These methods stimulate interdisciplinary research out of a need to learn more about the artist's materials and how they are used.

Fundamental techniques such as optical microscopy and x-radiography are very helpful for initial examination. The microscope can reveal repaint. It complements ultraviolet light examination and can uncover damage and unusual surface phenomena. Minute paint samples, prepared in cross-section and observed under the microscope, provide a unique view of paint layers.

X-radiography remains today the primary non-destructive method of technical examination used to study works of art. It is relied upon for an overall view of a work in a field where much of the analysis is carried out on samples. The x-ray image reveals the hidden structure of objects, previous restoration, brushwork, compositional

changes as well as minor alterations by the artist.

The field of technical studies expanded considerably as in-depth historical questions could be answered and more analytical instruments appeared. An area of research developed which went far beyond authentication. Separate studies developed that were not necessarily linked to conservation. Now, researchers could assemble a body of information on the artist's working style, technique, and materials. Increasingly smaller samples of paint and other materials were used as laboratory techniques became more sophisticated. Techniques such as gas chromatography/mass spectrometry (GC-MS) identify organic media such as oil, tempera, wax and gum. And, GC-MS can separate the components that an artist used as binding material. This information is essential especially in studies of painting techniques used in the 15th century when artists worked with mixtures of oil and tempera. Modern instrumentation such as Fourier Transform Infrared Microscopy and High Performance Liquid Chromatography greatly aid the identification of lakes and dyes which were sometimes added by the artist to intensify the more muted inorganic pigments.

Radiographic studies expanded with the introduction of neutron induced autoradiography. This technique complements x-radiography by increasing the number of pigments that can be observed. Lead in lead white is the principal element observed in x-radiographs while absent in the autoradiographic image. Many elements that make up the artist's pigments, such as manganese in the umbers and antimony in Naples yellow, are visible with autoradiography. This technique reveals information from deep within the painting structure. Most importantly, the graphic style of the underpainted sketch, blocking-in of colors and artistic changes are apparent in the autoradiographic image.

Infrared photography, in an earlier period, revealed only cursory information on the underdrawing or preparatory sketch beneath the paint layer. With Dutch physicist van Asperen de Boer's discovery of infrared reflectography in the late 1960s, additional information on the underdrawing could be extracted. For the first time, researchers could see the underdrawing on a television monitor where it could be photographed.

Nowadays, images are assembled by computer. Considerable data have been gathered on underdrawing style in northern Europe during the 15th

and 16th centuries. In addition, studies on techniques of works from Italy, Spain, France and the United States have added to the broad body of knowledge in this area. Symposia devoted to underdrawings are organized biannually in Belgium.

Conservators have a battery of techniques at their disposal. More non-destructive techniques are continually being developed. Images are put on CD-ROM for wider distribution and easy access to researchers. Image processing has improved legibility and handling of technical documents. Today the field of technical studies flourishes as researchers seek more ways to scrutinize artistic invention.

Codes of Ethics for Conservation Practice

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Résumé

Les conservateurs-restaurateurs en général prétendent se conformer à un code d'éthique et suivre des principes reconnus pour exercer la pratique de la restauration. Combien cette attitude est-elle répandue, particulièrement dans les pays développés? Des questions, cependant, encore plus importantes sont soulevées comme l'adéquation à la société multiculturelle d'aujourd'hui des codes d'éthique existants.

A code of ethics is a «written set of principles, guidelines or rules, formulated by or for a group of individuals or organisations with a common purpose, to improve the behaviour and public service functions provided by the group and its stature within the society it serves» (1)

Since the early 1960s, the conservation profession (covering both movable and immovable cultural property) has been concerned with establishing codes of ethics and guidance for conservation practice. In 1964, the IIC-American Group (now the American Institute for Conservation – AIC) first proposed standards of practice, including professional relationships, for art conservators, known as the *Murray Pease Report*. (2) In the same year Unesco published its *International Charter for the Conservation and*

Restoration of Monuments and Sites (the Venice Charter).⁽³⁾ Since then codes of ethics dealing with movable cultural property have been developed on a national basis with codes being produced by the U.K. Institute for Conservation (UKIC) in 1982, the International Institute for Conservation-Canadian Group (IIC-CG) in 1986 and the Australian Institute for the Conservation of Cultural Material in the same year. Most of these have been revised over the years, the latest being the AIC *Code of Ethics and Guidelines for Practice* which was adopted in 1994. The first attempt to promote a code of ethics for movable cultural property at the international level was in 1986 with the ICOM Committee for Conservation (ICOM-CC) *The Conservator -Restorer: A definition of the profession*.⁽⁴⁾ More recently the European Confederation of Conservator-Restorer's Organisations (ECCO) has adopted a set of *Professional Guidelines* including *The Conservator-Restorer: The Profession; The Code of Ethics, and Basic Requirements for Education in Conservation/Restoration*.⁽⁵⁾ In these two documents the term *conservator* is always joined to the term *restorer* (the latter more commonly used where Romance and Germanic languages are spoken). In this paper the term *conservator* includes the term *restorer*. The ICOM-CC definition, however, is more concerned with setting forth the basic principles and requirements of the conservation profession (an awareness exercise) rather than providing an international code of ethics for conservation. ECCO has applied the basic principles of the ICOM-CC definition to the European situation. Are these documents applicable world wide, or is a different international code of ethics required for those conservators working in countries which do not have a national code of ethics?

On the other hand, as regards immovable cultural property, the development of a code of ethics started at the international level with the *Venice Charter*,⁽³⁾ and has in a couple of instances been adapted for the national needs of a country. An example of this is the Australia ICOMOS *Charter for the Conservation of Places of Cultural Significance (the Burra Charter)*, adopted in 1981 and revised in 1988. More recently this has been published as *The Illustrated Burra Charter*,⁽⁶⁾ and to date 3,000 copies have been distributed free of charge or sold, many overseas. This shows the value of such a document.

But, how useful are these documents in real practice? In Australia the *Burra Charter* includes guidelines on cultural significance, conservation policy and procedures for undertaking studies and reports. A regular series of workshops are held on these topics for those responsible for the administration of cultural heritage. This does not seem to happen for movable cultural property. It is assumed therefore that conservators/restorers are either taught ethics and good conservation practice during their conservation training, or pick it up in the work place. Is this sufficient? Is the conservation profession satisfied with the ethical conduct of its workers?

More recently questions have been raised as to the applicability of codes of ethics to many conservation practices. All the codes state that conservation processes must be governed by respect for the aesthetic, historic and physical integrity of the object. The ECCO Code of Ethics indicates the need to take into account the social use of cultural property.⁵ The Canadian Code of Ethics⁷ goes further and includes «conceptual integrity» which is «meant to include the non-physical, conceptual attitudes of the piece – its symbolic importance in society, for example». (7) However, it is claimed by Miriam Clavir that this does not go far enough.⁽⁸⁾ The use of the object, in the past, present and future, and the cultural needs of the traditional custodians must all be considered. There is often conflict between preserving the physical integrity of the object, ie to stop it deteriorating further, and preserving evidence of material culture. For example, food stains on a bowl or body stains on a textile will accelerate their deterioration, but if removed will take away material culture evidence and may also offend the traditional custodians of the objects. It has been claimed that «Ethnographic conservators work on pieces which have layers of importance and meaning – symbolic, intellectual, emotional, spiritual – to their originators and their descendants. They do not work on artefacts»⁸ Ethnographic objects have been used in the past, and for living cultures they must be available for use today and in the future. Do the current codes of ethics accommodate this? Of interest is that libraries and archives have to make their collections available to the public. The big move today is public access and preservation management of collections. Whereas in the past several hundred items might be conserved or restored each year by a library conservation laboratory, today thousands are being processed to ma-

ke them available to the public. There is a big swing away from single item treatment. Do codes of ethics cover this?

Historic buildings have to be used to justify their existence and the large sums of money spent on their restoration. A discussion paper has just been released arising from concern amongst conservation practitioners over conflicting values among different cultural groups in relation to conservation practices and the Burra Charter.⁽⁹⁾ The document proposes a draft *Code on the Ethics of Coexistence in Conserving Significant Places*, and makes recommendations for changes to the Burra Charter to accommodate the needs of diverse cultural groups in Australia.

So, it appears that we do accommodate some of these issues in practice – possibly in spite of their lack of attention in most codes of ethics. But do such codes need updating in light of the pressures being brought to bear on issues such as cultural identity and diversity?

It is quite normal that prior to entering a museum many objects were used around the home for years, often with no particular care or maintenance. More significant objects such as family heirlooms or ceremonial items are usually better looked after, but not to 'museum standards'. However, as soon as any of these objects enter a museum they seem to become 'unique, significant, fragile and highly sensitive etc etc'. They have survived often for centuries without particular care, but now unless they are stored or displayed in a 'museum environment' it is claimed they will rapidly deteriorate. Although this is true for some objects, many will not deteriorate. The additional question is how significant are the objects and should the same level of preservation be given to all objects irrespective of their significance. The codes of ethics state that we should give the best possible treatment to every object, but today with so many pressures, is this realistic? The problem is that codes of ethics for movable cultural property rarely address the question of significance. On the other hand the codes for immovable cultural property^{5,6} require the cultural significance of the building or site to be determined as the first stage in developing the conservation plan.

Librarians and archivists have questioned the relevance of the codes of ethics which are more directed towards museum (including art) collections. As mentioned earlier library and archive

collections are used, and in addition the collections have to be prioritised. Attempts have been made by the Australian Council of Libraries and Information Services (ACLIS) to define what is meant by 'significant' material. The problem is that all library material is significant to someone. The fact that a document has been produced gives it significance. However, three rankings of significance have been proposed, high, medium and low: material of high significance will be acquired and preserved at all costs and will be included on a national data base; . material of medium significance may not always be preserved in its original format. It will be fully catalogued and included on a national data base; . material of low significance may be sampled for retention, either in original format or copy. Extensive preservation is unlikely and minimum cataloguing will occur.

Of course rankings for specific items may change over the years.

Although libraries use this approach to manage and preserve their collections, can the same approach be used for museum collections? How are decisions made as regards priorities for conservation treatment or is everything today 'exhibition driven'? The load of 'blockbuster' exhibitions does put a heavy strain on conservators and can lead to 'cosmetic conservation' – «just clean it up for the exhibition». Does this mean that codes of ethics are being compromised?

Therefore it appears that codes of ethics need to address the significance of objects and collections, and these have to be taken into account when determining the level of conservation treatment carried out. On a final issue, it is one thing to have a code of ethics and guidance for conservation practice, but another to enforce it. Some codes merely provide guidelines with no means, or even intention of enforcement. In the past the AIC had through its code means of reporting allegations of unethical conduct, but there were no clearly defined sanctions, penalties or even processes to deal with offenders. In the November 1994 issue of the AIC Newsletter¹⁰ AIC is addressing this matter and is calling for suggestions on how to enforce their *Code of Ethics and Guidelines for Practice*. It is a very difficult issue as just signing a statement to abide by a code of ethics is meaningless unless there are processes to enforce it including sanctions and penalties. In Australia the Australian Heritage Commission offers grants for building conservation projects on the understanding that the work is carried out according to the

Burra Charter. Unfortunately they cannot legally enforce this or penalise offenders (apart from not offering grants in the future).

It therefore appears that codes of ethics and guidance for conservation practice are necessary for conservators when working professionally. They not only give guidelines to the conservator but can also provide protection in the event of conflict. They also inform related professions about how conservators conduct themselves. However, the codes must be flexible and able to take into account the various diverse needs of the collections and the indigenous peoples associated with collections. A number of questions have been asked in this paper which need to be addressed if the current codes of ethics have relevance in today's multicultural society.

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La formation des restaurateurs: spécialisation, interdisciplinarité et dangers

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Abstract

Specialisation, by patrimony sector, and interdisciplinarity characterize today's restorer's craft, now a partner of historians and scientists. Active in a field bordering history, sciences and technical know-how, altogether in broad conception, daily practice and research, a restorer must avoid extreme sophistication which would cut him off from his interlocutors and hold workshop practice as paramount priority in his job.

Only a high level of formation can enable him to fully endorse the cultural restoration act strictly abiding by both the authenticity and a sensitive approach of whatever bears witness of art and culture.

Evolution des mentalités :

Le restaurateur de biens culturels n'est plus ni un artiste replié dans sa tour d'ivoire, ni un artisan exécutant confiné dans le tiers ordre d'une société dominée par l'Histoire et la Science.

L'irruption des sciences vers 1930-1950 a modifié le concept de restauration et entraîné le praticien de la restauration à enrichir son métier d'un volet scientifique (physique, chimie et biologie) mais aussi à l'équilibrer par le développement de la rigueur de l'esprit critique; le restaurateur est devenu le partenaire des hommes de laboratoire et des historiens, archéologues et architectes.

À la croisée des chemins des sciences physiques et des sciences humaines qui ont fécondé son précieux savoir technico-artisanal, le restaurateur est devenu progressivement, depuis vingt ans, tout autant le concepteur que le praticien d'un projet global de conservation-restauration comprenant la conservation préventive, l'intervention de type médical et, si cela est nécessaire, l'intervention chirurgicale.

Le restaurateur étant toujours un praticien, sa formation est nécessairement longue et *spécialisée*. Il doit très bien connaître les matériaux et maîtriser leur mise en œuvre ; celle-ci exige une sensibilité artistique à côté de la dextérité manuelle, qualités qui sont le résultat d'un long «commerce» avec la matière.

Le restaurateur étant le partenaire de spécialistes d'autres disciplines, sa formation est nécessairement *interdisciplinaire*: le résultat d'un travail d'équipe dû à l'échange permanent d'hypothèses et de raisonnements des divers participants de l'équipe est dit «intégré» ; cette interdisciplinarité s'oppose à la pluridisciplinarité où le résultat est dû à la confrontation finale des diverses disciplines qui n'ont pas échangé leurs méthodes en cours de travail.

Le restaurateur, spécialiste non disjoint d'une équipe plus vaste dont les participants sont complémentaires, doit posséder les qualités humaines qui font de lui un homme de dialogue.

Spécialisation, niveaux et recherche en formation académique:

La *spécialisation* découle du principe de sélection et de la durée des études choisies. Ces deux notions relèvent dans chaque pays de traditions culturelles spécifiques.

Si la sélection s'effectue par l'étude de dossiers de candidats ayant déjà une expérience en restauration, la durée des études et le choix du degré de spécialisation ne peuvent guère être semblables à ceux qui découlent d'une sélection large par concours très ouvert, où les candidats n'ont pas pratiqué la restauration au préalable. Un futur praticien recruté pour des études de 4 ans, par concours ouvert, ne peut acquérir une compétence que si la spécialisation est acquise dès l'origine. La durée de 4 ans est limitée en France par le contexte financier spécifique du Ministère de la Culture et le contexte culturel général de l'enseignement dans ce pays.

Le concours est la tradition française du recrutement démocratique fondé par la Révolution (en 1794, la Convention crée l'École Normale Supérieure et l'École Polytechnique), poursuivie par les diverses Républiques (École Nationale de l'Administration, 1945).

Les difficultés d'un enseignement interdisciplinaire, pour obtenir un *niveau* satisfaisant, tiennent à l'hété-

rogénéité de la formation préalable du candidat à la restauration: en provenance des sciences physiques, il doit acquérir un véritable savoir-faire manuel à côté d'une solide formation historique ; en provenance de l'histoire de l'art ou de l'archéologie, il doit combler ses lacunes en culture matérielle ; en provenance du monde technico-artisanal, il doit acquérir les raisonnements et la rigueur critique des disciplines de l'esprit.

Même si le niveau initial est fort varié, le niveau final, après une formation interdisciplinaire telle celle décrite ci-dessus, est supérieur, ce que les inspecteurs traditionnels de l'enseignement, compartimenté par type de science, contestent souvent.

Si l'on décide de former non pas des restaurateurs, au plein sens du mot, donc de niveau supérieur, mais des techniciens de la restauration appelés à exécuter des tâches précises au sein d'une équipe dirigée par un restaurateur, il n'est pas nécessaire de donner à ces exécutants tout un appareil critique complexe s'ils ne sont pas appelés ensuite à le mettre en pratique. Ce problème est grave car il soulève la question de la place du restaurateur du patrimoine dans la société de demain.

La méthode de travail du restaurateur l'oblige à une approche interdisciplinaire quotidienne tel un médecin. En tant que praticien, il développe des examens «cliniques» du patrimoine traité à diverses reprises et de manières différenciées ; attaché à progresser dans son métier, il pose les bases d'une *recherche en conservation-restauration* où les sciences physiques d'une part, les sciences humaines d'autre part, jouent le rôle de sciences-outils ; le respect de la position du restaurateur, dans une équipe où plusieurs disciplines sont représentées, est essentiel pour que le résultat corresponde à l'attente de tous.

Difficultés et dangers de la formation académique:

La *sophistication* extrême dans le domaine des sciences physiques peut être inadéquate par rapport à la question posée: est-il toujours indispensable de traquer l'infiniment petit? Un certain savoir scientifique est-il transférable dans un esprit formé aux sciences humaines sans risque de difficultés d'assimilation et de développement d'un scientisme dangereux? La surenchère en matière d'exigence d'analyses de la matière n'est-elle pas

quelquefois le paravent de l'ignorance ou en tout cas de la mauvaise maîtrise du sujet ?

Souvent dans la formation académique, l'insuffisance du temps de *pratique d'atelier* entraîne une distorsion entre les capacités pratiques du diplômé par rapport à ses compétences intellectuelles: il s'agit du cœur de la respectabilité du métier de restaurateur. La formation en atelier est toujours longue, ce qui la rend souvent chère et difficile à assumer dans le cadre des institutions tenues à des ratios tels le nombre d'étudiants par enseignant, fort lointains de ceux des écoles dites professionnelles.

De plus, les maîtres de la pratique d'atelier sont à chercher à l'extérieur de la Faculté, au sein de la profession et leur rémunération n'entre pas toujours dans le cadre général de la formation même supérieure.

À l'heure actuelle est posé avec acuité le difficile problème des deux types de formation d'une part *longue*, initiale, théorique et pratique, complète et spécialisée, d'autre part *courte* et non spécialisée. Une formation courte a l'avantage de «former» des hommes que l'on croit capables de travailler sur différents types d'œuvres comme le souhaite chaque petit musée polyvalent ou chaque groupe de monuments qui ne peuvent «s'offrir» les services de restaurateurs spécialisés compétents chacun dans son domaine patrimonial étroit ; il s'agit d'un leurre car le soi-disant restaurateur n'est qu'un «Maître Jacques de la profession» ; il ne s'avère pas compétent en tout et met le patrimoine en danger. Mais sur le marché du travail, un tel personnel est plus souple et moins cher qu'un restaurateur de bon niveau, donc peut être considéré comme plus adéquat par des responsables habitués à ordonner plutôt qu'à dialoguer. Le danger qui menace de nos jours la conservation-restauration du patrimoine est quelquefois la mauvaise perception de la complexité de la restauration par des responsables culturels insuffisamment formés à leur métier.

La restauration n'est ni une réfection de type artisanal, ni une expérience scientifique, ni une rénovation oubliée de l'histoire, c'est un acte *culturel* subtil où les liens de l'œuvre d'art tant avec le passé qu'avec le présent doivent être rétablis dans le double respect de l'authenticité et de la lecture sensible du témoignage artistique. Une telle attitude exige un ni-

veau supérieur de formation tant des restaurateurs que de leurs partenaires.

N.B.: L'essentiel des notions ci-dessus est issu des textes de Paul Coremans et de Paul Philippot et de la définition de la profession de «conservator-restorer» inspirée par Agnès Ballestrem.

Prema 1990-2000: réponse à un patrimoine en péril

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Abstract

In 1990, ICCROM launched a 10-year programme of training and technical assistance (PREMA) for African museum professionals based on surveys in the field and pilot activities between 1986-89. Like any long-term training programme, it is only now, at mid-point that the blossoming results can be appreciated – a growing network of nearly 300 professionals from 39 African countries have benefited from the programme. The future success of the programme depends on further developing this network into teams of teachers and coordinators.

Lancer un programme de formation, c'est prendre un engagement dont les résultats définitifs ne pourront être appréciés qu'à long terme. Entre temps, il faut maintenir un effort important de mobilisation. C'est dans cette entreprise difficile que s'est engagé l'ICCROM en prenant l'initiative du projet PREMA (Prévention dans les Musées Africains) qui s'étale sur dix ans. Ce choix ne relève évidemment pas du hasard. Il repose sur un ensemble de constats et d'analyses préparatoires rassemblés entre 1986 et 1989. L'état des lieux paraissait alors plus qu'inquiétant: dans la quasi totalité des musées examinés, les collections subissaient l'action de facteurs de détérioration massive et irréversible tandis que le personnel «technique» en place n'était pas en mesure de faire face à la situation. À terme, c'est l'ensemble du patrimoine dont les musées africains avaient la charge qui était donc menacé de disparition, d'où les deux objectifs majeurs du programme définis en 1986 et précisés en 1988: assurer la conservation des collections des musées de l'Afrique subsaharienne et créer un réseau de professionnels africains capables de pren-

dre en charge la conservation de ce patrimoine et la formation de leurs collègues.

Pour atteindre ces objectifs, le projet PREMA 1990-2000 a développé une série d'activités interdépendantes centrées essentiellement, mais non exclusivement, sur la formation d'un personnel qualifié pour les musées africains.

Ces actions de formation qui s'adressent à différentes cibles comportent quatre volets: un cours de spécialisation en conservation préventive pour le personnel de niveau universitaire, un programme de formation pratique destiné au personnel de niveau intermédiaire, des séminaires d'information pour les chefs d'établissement, des actions de formation de formateurs et un programme d'assistance technique pour soutenir les programmes de conservation des musées africains.

Le cours universitaire est l'élément central de l'ensemble du projet. Il a pour objectifs spécifiques: l'enseignement des principes fondamentaux de la conservation adaptés aux conditions des musées d'Afrique subsaharienne; l'enseignement des opérations fondamentales nécessaires à la préservation à long terme des collections; et enfin le développement des capacités de communication des participants afin qu'ils puissent transmettre efficacement à leur collègues les connaissances acquises.

Pour un certain nombre de raisons (coût, commodité, similitude des situations), ce cours se déroule en deux versions alternées: francophone et anglophone. Chaque promotion compte une douzaine de participants venus de pays différents. Le cursus s'étale sur neuf mois et comporte près de 600 heures de cours théoriques et pratiques, la rédaction d'un mémoire et un voyage d'études collectif dans les grands musées européens. Il est sanctionné par un diplôme de spécialiste en conservation préventive délivré par l'Université de Paris I ou par l'Uni-

versité de Londres selon les cas. En effet, l'enseignement dispensé est placé sous l'autorité pédagogique et scientifique de ces deux institutions.

À partir de 1993, le cours universitaire qui se déroulait à Rome dans les locaux de l'ICCROM a été transféré en Afrique, au Centre d'études en muséologie de Jos au Nigeria puis à l'Université du Ghana à Legon par suite de difficultés inhérentes à la situation socio-politique actuelle du Nigeria. Il est momentanément suspendu dans sa version francophone en attendant les conclusions de l'étude de faisabilité de son accueil par une université africaine francophone.

Le second volet des actions de formation consiste en l'organisation avec un musée africain d'un cours national (ou sub-régional) basé sur la mise en oeuvre d'un programme de conservation préventive pour les collections des musées nationaux du pays d'accueil. Cette formation dure trois mois et regroupe en général une vingtaine de techniciens de niveau moyen. Ouvert parfois à quelques professionnels des pays voisins, il a déjà été organisé au profit des musées nationaux du Ghana, de la Côte d'Ivoire, de la Zambie, du Bénin et de Madagascar.

Pour intégrer la conservation préventive dans le développement global des musées et pour faire le point des actions de soutien aux musées africains, un séminaire de réflexion d'une à deux semaines est périodiquement organisé pour les directeurs de musée ou chefs d'établissement: c'est le troisième volet du programme. Quatre séminaires ont été ainsi organisés depuis 1990 respectivement au Niger, en Zambie, au Mali et au Nigeria.

La formation des formateurs est le quatrième volet de l'édifice. Il vise la constitution et le développement d'un réseau d'enseignants africains qualifiés. Des objectifs quantitatifs précis ont été définis. Parti avec moins de 10% d'Africains dans le corps enseignant, PREMA projette d'inverser ce

rapport en dix ans tout en maintenant des critères stricts de qualité. A mi-parcours, il se situe autour de 50 % et devrait croître rapidement. En effet, il a fallu d'abord asseoir le cursus universitaire d'où sont sortis les candidats présentant les meilleures dispositions pour être formés comme futurs formateurs. En 1998, vingt enseignants spécialisés sur différents thèmes, également répartis entre anglophones et francophones, auront été formés.

En complément aux activités de formation qui viennent d'être décrites, le projet PREMA développe des actions d'assistance technique pour soutenir la mise en place de programmes de conservation proposés par les musées africains, tant il est vrai que ceux-ci manquent souvent de moyens matériels pour démarrer. Parallèlement, les informations accumulées depuis le début du projet sont en train d'être rassemblées dans une banque de données qui pourrait devenir un outil de travail précieux sur les musées africains. Il convient de signaler aussi la création d'un bulletin de liaison timidement lancé en 1990 par d'anciens participants du cours universitaire. Ce bulletin fait son chemin et le quatrième numéro qui vient de paraître témoigne de la qualité et de la diversité du réseau qui se met en place.

Aujourd'hui, près de 300 professionnels de musées de 39 pays africains ont participé directement à l'un des volets de formation du programme PREMA. Ce chiffre devrait doubler dans les cinq prochaines années afin que l'Afrique au sud du Sahara puisse effectivement compter sur un véritable réseau de techniciens compétents capables d'affronter les graves problèmes que pose la sauvegarde de son patrimoine.

Si le bilan à mi-parcours du projet PREMA 1990-2000 est impressionnant, il faut cependant se garder de tout excès d'optimisme.

La sauvegarde du patrimoine est l'une des missions fondamentales du musée ; elle suppose des actions spécifiques nécessaires, mais non suffisantes au développement global de l'institution, en particulier sur un continent où sa pertinence sociale reste à démontrer.

C'est dire que la même attention doit être accordée aussi à ses autres missions, notamment à l'animation culturelle par laquelle tout musée s'enracine dans sa communauté. En outre, la grave crise que traverse la plupart des pays du continent n'est pas sans répercussion sur les musées ; fonction-

nant avec des budgets dérisoires voire inexistantes, ils doivent faire face maintenant à la diminution de leur personnel pour cause d'ajustement. C'est une tendance qu'il faut intégrer dans la réflexion afin de rechercher des solutions alternatives.

Ces questions, qui aujourd'hui ne peuvent plus être éludées, seront abordées lors du prochain séminaire des directeurs de musées organisé conjointement par l'ICCROM et le CICIBA (Centre des Civilisations Bantou), séminaire prévu pour le mois de juillet 1995 à Libreville au Gabon.

Depuis son lancement, le programme PREMA 1990-2000 qui a un coût largement supérieur aux capacités propres de l'ICCROM a été financé grâce aux contributions apportées ponctuellement par différents donateurs: organisations internationales (UNESCO, Communauté européenne, ACCT), ministères de la coopération (de l'Allemagne, du Danemark, de la France, de la Finlande, de la Norvège, des Pays-Bas, de la Suède, de la Suisse et de l'Italie), ou fondations privées (Dapper, Getty et Elf, Leventis).

Ceux-ci continueront-ils de soutenir l'effort engagé pour les musées africains ?

Documentation as a Tool in the Conservation of Museum Collections

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Résumé

La documentation est la source de toutes informations nécessaires pour la direction d'une entreprise (personnel, organisation, bâtiments, finance, œuvres d'art, ...), pour tous les aspects de sa gestion et pour l'utilisation de ses ressources de manière optimale. Elle fait partie du «patrimoine intellectuel» d'un musée, constitue son outil principal de recherche et permet d'estimer la valeur des collections autant pour l'institution que pour

le public. La documentation fournit aussi les données de référence indispensables aux départements de conservation. Elle permet de discuter de l'importance de la pièce à traiter, d'évaluer avec précision les ressources nécessaires pour la mise en œuvre d'un projet de restauration et de guider le choix d'intervention sur une pièce plutôt qu'une autre en mesurant les conséquences.

Lors de l'examen ou du traitement d'une œuvre, toutes les données découvertes ou rassemblées par le restaurateur appartiennent à son identité et doivent donc être enregistrées et communiquées au conservateur afin que, sur la base de ces informations, les générations futures puissent prendre leurs propres décisions pour sa préservation. Pour qu'un système de documentation soit efficace, il doit être précis, concis et régulièrement mis à jour afin de fournir rapidement les informations demandées. Celles concernant la restauration ont souvent une structure récurrente qui convient bien aux procédures automatisées. Ces dernières, plus économiques, sont aussi plus flexibles et assurent une meilleure diffusion des données entre institutions et individus.

Pour établir un système de documentation performant, il faut décider du type et de la quantité des données à y introduire ainsi que des méthodes d'enregistrement. Le profil de l'utilisateur, les problèmes de validation, de mise à jour, de recherches, de restitution ainsi que la fréquence et la rapidité d'utilisation sont également à prendre en compte si l'on veut arriver à établir des normes qui permettraient le développement de systèmes commerciaux pour la conservation et l'administration des collections.

This short paper looks firstly at what documentation is and why it is important, secondly at the information needs of conservation departments in museums, thirdly at what constitutes good documentation practice and lastly at what is involved in setting up a documentation system.

What is documentation and why is it important?

Documentation is nothing more nor less than the information needed to run a business. This includes information about people and organisations, buildings, finance, objects, goods and services, transactions, and collections management activities. It is needed for all aspects of managing an enterprise in order to apply resources effectively to the needs of the organisation. These include planning, assessment, co-ordination, selection, monitoring and controlling, decision making, directing, research, and publication.

Every museum exists for a reason. This is not generally to make a profit

for the shareholders though accountability for use of resources is increasingly important. Accountability is underpinned by planning. The planning process begins with mission and policy statements that determine the legal framework within which the museum operates. Long range strategic plans set priorities that progressively become shorter range and more personal, eventually translating into forward job plans for individuals. The documented plan is used as a tool for estimating resources and for raising money. Later it can be used as a performance indicator to demonstrate value for money, assess performance against targets, identify areas that need improvement, set fresh targets, and assess the need for changes in policy or procedure.

Typically, museum plans are concerned with using the collections and other resources at their disposal to increase understanding and enjoyment of art, craft and design. Museums have to acquire (and dispose of) objects, house them in suitable environments and make them accessible, through displays, exhibitions, loans, and publications. Objects have to be catalogued, photographed, cleaned, conserved, and mounted and buildings have to be maintained. All these processes entail risk to the collections which must be controlled. This requires that we have recorded policies and procedures, that we know what objects are in our collections, where they are and hundreds of other essential things about them.

Documentation supports the activities that support the organisational mission. It is part of the intellectual collection of museums and is the principal research tool in any museum. The standard of documentation determines the value of a collection to the Museum and its audience. Access to collections is aided by proper record keeping.

Information needs of conservation departments in museums

A paradox of museums is that they must *use* the objects in their care but must also *preserve* them for future generations to use. This depends on conservators, curators, scientists, engineers, educators, researchers and administrators working together to make good decision to ensure the museum's continuing success.

The basis of good decision making is good information and good communication. The information needs of conservation follow from the plan. The plans of different museums will differ

in some important ways but there will also be many similarities. I will use the V&A Conservation Plan to provide examples.

Our mission is to meet the conservation needs of the Museum and to contribute to the development of the profession as a whole. We attempt also to inform the perception of need. In pursuit of this mission, we have two primary objectives. The first is to ensure that the collections in our care are stable, in optimum visual condition and technically understood. The second is to achieve and demonstrate the highest standards of conservation practice, training and research. Further to these objectives we have identified six activities that we need to do well and performance measures that will show us how well we are doing.

These are conservation, research and development, education and training, communication, control of risk, and management. All these activities have a documentation component that is essential to their success. Some examples of the kind of information required to achieve these aims will now be considered.

In managing the work of the conservation department we aim to strike a responsible balance between activities, allocate resources accordingly and ensure resources are used effectively. This requires knowledge of present and future needs, resources and performance. One measure both of need and of success is the state of the collections. An overall measure of object condition at one point in time is a measure of need. At two points in time this can become a measure of change. We use a numbering system from one (best) to four (worst) to describe overall conservation condition. We should therefore be able to state the percentage of each collection in each condition category. In practice, it is unlikely that we can know accurately and simultaneously the condition of all the objects in the collections. In the time it takes to find out the answer it may change. This leads to some important notions. Firstly, it is possible to get a sufficiently accurate picture of the condition of a whole collection by surveying part of it. Secondly, conservation condition is only one indicator of how we should target resources. An equally important one is the curator's view of the relative importance of the objects in the collections. Thirdly, before dedicating extensive conservation resources we should ensure that the collections are in satisfactory environmental conditions. The percentage of

collections that can be so described is another important indicator.

A single indicator for condition is complemented by further information as to what is wrong with an object and what is required to put it right. The approach to this is to describe eight categories of damage that can be universally applied. These include major and minor structural damage, surface damage, biological damage, chemical damage, accretions, and old repairs. Together with an estimate of the time resources required these can give a useful estimate of conservation condition, risk and priority. In particular this system allows comparison of one collection with another.

In theory the assessment of the environment should precede the recording of object condition. In practice the two are often linked. Many survey programmes identify very obvious deficiencies in environmental conditions particularly in the way objects are stored and have formed the basis of important preventive conservation programmes. They also lend perspective to programmes of interventive conservation. When such a comprehensive assessment of conservation priorities is documented it should contribute to the highest levels of decision making in the Museum.

Museums thrive on loans, exhibitions, and new galleries as well as maintaining their core collections. It is important for conservators to be able to estimate the resources a proposed project will require and be able to state the implications of undertaking one project or another. Information collected from previous treatments can be used for estimating the conservation resources needed for future work. The documented incidence of damage arising from different collections management activities can pinpoint the need for better training, policy and procedures. If this information is properly recorded it can tell us a lot about how resources are currently being used and how effective this use of resources is in achieving our primary objectives and how the allocation of resources might be changed.

The process of active interventive conservation is one of the riskiest activities carried out in museums. Conservators can not only make discoveries that change the way an object is perceived but can change objects in a way which may be unacceptable. There is accordingly a huge burden of responsibility of decision making. It seems that there are no right answers but there are good and bad processes of decision making. The decision making process should begin

with a clear understanding of purpose. It is of paramount importance that consultation of all available records and discussion with stakeholders takes place to consider the significance of the object to be treated and the effect of various possible alternatives on significant factors. All the options are then considered in relation to the resources available to predict the likely outcomes of each alternative. The methods by which the success of the treatment are to be judged are worked out before the treatment is undertaken. The documentation components of this decision making process are considerable. Some of the questions we ask are:

- Have all available records been consulted?
- Has the object previously been conserved/ restored?
- Is the artist's intention documented?
- Is there any copyright in the work?
- Has the Collection Catalogue been examined – Is the object uniquely identified and do the number and description match the object?
- Is the object one of a set?
- Are there photographs of the object?
- Is a scientific input required?
- Have all the factors contributing to the identity and significance of the object been considered – historical, technical, associations, sacred, markers intentions?
- What effect will my actions have on the evidence for these factors?

Everything the conservator finds out about the object during examination or treatment becomes part of the new identity of the object and must be recorded and communicated to the curator. This includes everything added or removed, the results of analysis, the nature, location, and extent of treatment, and all drawings, photographs, and measurements. Evidence left intentionally on the object as a guide to those who follow should also be noted. Only in this way can those who follow have satisfactory documented evidence on which to base their own decision making and the continued survival of the object.

Individual records over a long period enable patterns and trends to be recognized and statistics to be generated. They also form a resource for further research and development, education and training, and communication with the profession.

What constitutes good documentation practice?

The above examples require information to be shared. Engineers and scientists communicate information about

the built environment to conservators. Information about the conservation condition of the collections is obtained by conservators and used by curators and conservators to determine priorities. Technical information from conservation scientists and historical information from curators is used by conservators in formulating treatment proposals.

However, much of our documentation is still held in the form of day books, paper forms, diaries, card indexes, files and ledgers. These paper systems have several inherent disadvantages. Firstly access is restricted. If only one copy is available, access is physically restricted to those close to it. The creation of multiple copies risks the introduction of inconsistencies and errors as each owner makes small alterations to the record. In paper form the logical order is also the physical order. To find information by other search criteria involves cross referencing. This also introduces redundancy and risk of errors. The format of the paper system is unlikely to be suitable for all applications for which data are required. Paper systems are physically bulky and have limited durability and security. It is virtually impossible to maintain an adequate backup to cover the event of loss. Calculations and statistics based on paper systems are prohibitively labour intensive. Such systems have not been properly planned, co-ordinated or controlled and do not permit the kind of shared use that is essential to ensure the required flow of data around or between organisations. Today's information systems are therefore developed with automation in mind.

A good documentation system will be maintained in an accurate, complete, concise and up-to-date condition to provide the right information to the right people in timely fashion. The system should conform to Museum wide data standards and allow monitoring and control of terminology and validation of items such as dates and codes at the point of entry of data into the system.

In an automated system, periodic audits can be undertaken to ensure the integrity of the data. Conflicting requirements of different users can be met and many different logical views of the data allowed enabling us to search freely, to select the items we wish to see and decide how these should be presented. At the same time only one physical record is maintained. This control of redundancy not only leads to greater consistency but achieves economy since data are entered and stored only once.

Much conservation information has an inherently regular structure and is particularly suited to automated procedures. The disadvantages of automated systems are their size, complexity and cost, the additional hardware requirement, and the higher impact of failure.

Setting up a documentation system.

The goal, which is the same for manual and automated systems, is to meet organisational requirements, to solve problems and make decisions. It is therefore important to clarify what is to be achieved and what problems are to be solved.

The real world situation then has to be mapped on to the computer and it is therefore necessary to understand the concept behind the software. A simple view of events is that, data are input, processed, stored, processed again and then output. Analysis of requirements should be principally concerned with the output that is required and then with the storage, processing, and input required to achieve that output. In more complex situations, formal methodologies can be used to define what has to be done, when, and to what standard to create the system. For larger projects, a feasibility study is generally recommended to define the problem to be addressed and the scope of the project intended.

Analysis of the problem begins with a statement of the physical reality of what is actually done now. To whom is information sent and from whom is it received? In what form is it sent and received? What are the processes that act on it or in which it is involved (eg condition reporting, acquisition, loan). From this statement of present physical reality a specification of logical requirements can be developed that is removed from physical considerations of individuals, forms or files. The next step is to produce a design that will turn the desired logical system into a physical reality.

Data design requires decisions to be made about the sort of information that is to be processed, the amount of space that should be allocated for each type and how information should be grouped into files, fields and records. Examples, of data types include free text, structured text, numbers, dates and images. Data design is often referred to as leading the design because *what* we do is much less likely to change than *how* we do it.

Detailed process design is concerned with issues as validation of data on entry, batch versus individual upda-

ting of records and the need for calculations on the data (eg volume from dimensions). Retrieval is of paramount importance and the keys for data indexing and selection, sequencing, formatting, and types of device required for output all need to be carefully considered. At this stage, it is also necessary to consider how much information will be processed, how often this will occur and how fast it should be done; also, who will process it, who will share it, what kinds of access controls and security are required and most importantly, what it will look like to those who will use it.

Armed with this information, a package or system is chosen with which to implement the design. This can be specially commissioned, though this is likely to be expensive, error prone and time consuming. Alternatively, an off the shelf package can be purchased or a general purpose data management system adapted to our requirements. Off the shelf packages have for some time been available to libraries because they have sufficiently common purpose and clearly defined standards. The general lack of standards, until recently, has hindered the commercial development of systems for conservation and collections management.

La conservation-restauration en archéologie: le nombre et l'urgence.

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Abstract

Nowadays, the activity of archaeologists spreads with unequalled fullness everywhere in the world. What is the future for this past which is exhumed at a growing pace and is getting more plentiful with the day?

Practicians have to adapt themselves to the situation at the price of often difficult changes. They must engage a race against number and urgency, convince that patrimonial responsibility and scientific archaeology are not dissociable and also see that conservation-restauration problems are integrated into the programmation of all archaeo-

logic research. The prevention care must be omnipresent and research must help to develop a better knowledge of materials and objects. Finally, it is necessary to improve the diagnostic tools, determine priorities and degrees of intervention and choose the more appropriate types of treatment in the present context of excavations.

L'archéologie retrouve ses origines (1), et dans le même temps l'activité des archéologues se déploie, avec une ampleur inégalée, partout dans le monde, précédant les grands projets d'aménagement du territoire, accompagnant la mise en valeur touristique de régions entières, apportant sa pierre au travail de conquête identitaire de jeunes nations, gagnant enfin de nouveaux champs: archéologie urbaine, archéologie industrielle, archéologie du paysage ...

Sources historiques, les vestiges archéologiques, qui surgissent de notre sol à un rythme accéléré, constituent aussi tout un patrimoine. Quel avenir pour ce passé?

La course est engagée. Non pas celle que mène depuis toujours la conservation-restauration contre le temps, et à laquelle nous sommes habitués (2), mais la course avec le nombre, avec l'urgence.

La volonté de plus en plus répandue d'exploiter rapidement les trouvailles anciennes ou récentes entraîne de nouvelles contraintes auxquelles doivent s'adapter les praticiens, au prix de mutations bien difficiles. Sans renoncer à tout ce que nous a appris le soin d'un objet singulier (respect de l'intégrité matérielle et historique, réversibilité et lisibilité de la restauration), nous devons passer du singulier au pluriel, de la trouvaille au «produit matériel de la fouille», de l'objet à la collection, du vestige isolé à l'aménagement du site.

Où en sommes-nous de cette course avec le nombre et l'urgence?

Le caractère destructeur des recherches archéologiques semble désormais compris, non seulement en ce qui concerne la fugacité des informations immatérielles (le contexte, la stratigraphie, etc...) dont on sait depuis longtemps que la fouille les fait nécessairement disparaître et que seules diverses formes d'enregistrement peuvent les sauver, mais aussi en ce qui concerne la fragilité particulière des matériaux exhumés, brusquement soumis à un nouvel environnement.

La généralisation des pratiques de conservation-restauration, dès le chantier de fouilles, a conduit à former des restaurateurs compétents, dotés d'une

bonne connaissance du raisonnement et de la pratique archéologiques. Le restaurateur est sorti de l'atelier, il s'est frotté aux conditions de travail sur le chantier. Souvent spécialisé (le plus souvent en relation avec un matériau précis), il a dû trouver les chemins d'une certaine polyvalence: ce pari délicat, dans un milieu ou crédibilité et hyperspécialisation sont peu dissociées, est en bonne voie. De nombreux pays disposent aujourd'hui de deux réseaux complémentaires de compétences: compétences larges qui s'exercent sur les chantiers ou au sein des services archéologiques et compétences pointues du travail en atelier.

Ces nouvelles compétences facilitent la mise en place d'une chaîne continue de la conservation depuis l'exhumation jusqu'à la présentation au public ou la mise en réserve. Mais cette chaîne repose d'abord sur l'intégration de la conservation-restauration à la programmation même de la recherche archéologique. Cette vision globale, qui inclut non seulement les aspects techniques mais aussi les outils juridiques et administratifs et qui mobilise les organismes patrimoniaux (en premier lieu les musées), permet de planifier de concert l'archéologie et la conservation des découvertes archéologiques. De ce point de vue, il est encourageant de voir s'imposer parallèlement dans les deux disciplines le souci de la prévention: en archéologie comme en conservation, il est de moins en moins concevable d'improviser.

La conservation-restauration engage donc la course avec d'importants atouts, les acquis de la conservation préventive et ceux de l'archéologie programmée, et une vitalité propre dont témoignent les publications de ces dernières années, qu'il s'agisse de manuels généraux (3), dont on observe avec plaisir qu'ils émanent d'équipes diverses et sont édités en plusieurs langues, ou d'articles attestant que la recherche de nouveaux procédés, l'amélioration des traitements disponibles restent plus que jamais à l'ordre du jour. Ces deux dernières décennies, la conservation-restauration a bénéficié de transferts de technologie comme la lyophilisation des matériaux organiques gorgés d'eau et la radiographie des objets métalliques pour n'en citer que deux, et elle en voit d'autres se préparer, comme peut-être la stabilisation de la corrosion par les plasmas. La gamme des techniques accessibles au restaurateur ne cesse ainsi de s'enrichir, et c'est tant mieux car nombreux sont les

problèmes encore mal résolus: citons par exemple la conservation de l'argile crue qui importe tant au patrimoine de régions entières du globe, ou encore l'impossibilité de réussir dans des climats extrêmes des gestes ailleurs si simples comme le collage durable et réversible d'une céramique.

Mais cette amélioration et cette diffusion des techniques sont handicapées par une connaissance encore insuffisante de la dégradation des matériaux et des objets. Des progrès importants ont pourtant été enregistrés notamment dans la connaissance de la corrosion des métaux ou des verres et de l'altération des bois gorgés d'eau. Seules, de telles recherches «fondamentales» favorisent la réussite des transferts de technologie qui se réduisent sinon à l'application empirique de techniques souvent lourdes et coûteuses, dont la généralisation est difficile dans les pays les mieux équipés et impossible dans les autres.

La recherche nous est donc plus que jamais indispensable; d'autant qu'à l'avenir, son attention devra aussi se porter en amont des traitements sur tout ce qui peut éclairer les choix dont procède inévitablement une intervention de conservation-restauration. Existe-t-il des solutions d'attente, des protocoles d'intervention minimale? Existe-t-il plusieurs degrés possibles d'intervention en fonction des objectifs poursuivis et de l'état de conservation des matériaux? Existe-t-il des traitements à la fois fiables et applicables à des groupes d'objets? Les restaurateurs n'échappent plus à ces questions, qu'elles soient soulevées dans certains pays par la multiplication des fouilles ou dans d'autres par la nécessité d'agir au moindre coût, pas plus que les archéologues n'échappent à des questions assez symétriques: tout fouiller? Fouiller tout ce que l'on fouille avec le même degré d'exhaustivité? Quelle place accorder à la prospection, l'inventaire et les sondages? Les restaurateurs ne semblent pas trop mal armés pour élaborer peu à peu leurs réponses, mais l'amélioration de leurs moyens diagnostiques est une étape majeure des progrès à venir.

Pourtant, ces outils diagnostiques qu'il convient de rendre plus sûrs et plus fins nous confortent parfois dans le choix de pénibles renoncements: laisser se détruire ce qu'il est trop difficile de conserver, réenfouir, conserver sans restaurer... Parce que la technique du restaurateur a ses limites, et les moyens financiers dont il dispose

aussi. L'archéologie scientifique en souffre-t-elle? Peu à court terme, car souvent l'étude est réalisée et les informations utiles sont récoltées. Les objets abandonnés semblent retrouver alors le statut précaire qui fut un temps celui de beaucoup de trouvailles: auxiliaires provisoires de l'histoire, et en quelque sorte vidés de sens et d'importance une fois interprétés. Mais à long terme, «la capacité de l'archéologie de demain à juger et à renouveler les interprétations d'hier se fondera en partie sur les documents que nous aurons su (et voulu) lui conserver»⁽¹⁾.

L'archéologie de ce siècle, en se détachant de ses origines antiquaires et en s'engageant sur le chemin des sciences sociales⁽²⁾, a souvent négligé le caractère matériel de ses sources comme si leur trivialité l'encombraient presque. Cette tentation n'est pas morte, loin s'en faut, et nous avons encore à convaincre: convaincre que responsabilité patrimoniale et archéologie scientifique doivent aller de pair. Chaque fois que la conservation-restauration parvient à fournir des informations insoupçonnées, à rendre étudiable un document que l'on croyait déjà détruit ou impossible à conserver, la conscience du caractère irremplaçable des vestiges archéologiques, de leur valeur patrimoniale gagne du terrain.

Mais il faut convaincre sur plusieurs fronts. Alors que certains objets ou sites sont délaissés une fois étudiés, d'autres sont menacés par une exploitation intensive au nom de la médiatisation ou du tourisme. Comment faire entendre les impératifs de la conservation préventive, la déontologie de la restauration, lorsqu'il s'agit d'amener les foules à une exposition bâtie autour de quelques objets prestigieux, ou de doter un pays de pôles touristiques attractifs? Si le développement des restitutions et des substituts (moulages, fac-similés, etc...) préserve souvent les vestiges originaux, il en oblitère aussi le caractère unique et irremplaçable, masque la nature hypothétique de ces mêmes restitutions et éloigne dans tous les cas le public de la réalité de ce patrimoine.

Enfin, si l'archéologue n'est plus collectionneur, d'autres l'ont remplacé qui connaissent mieux la valeur marchande que la valeur patrimoniale des objets et des sites et ignorent souvent trop de leur valeur documentaire et scientifique. Comment ne pas évoquer les patrimoines archéologiques définitivement amputés par les vols et les pillages, qui alimentent le trafic illicite des antiquités, malgré les efforts de l'UNESCO et ceux de l'ICOM⁽³⁾? Et le

développement des zones de littoral données en concession à des entreprises de fouilles sous-marines, dont on ne s'assure pas toujours que leurs buts et leurs moyens sont compatibles avec le double caractère scientifique et patrimonial de leurs activités? Que dire de ce paradoxe qui affecte la cohérence du patrimoine archéologique lorsque tant d'efforts sont consacrés à l'exhumation, la connaissance et la conservation de certains sites et objets alors que d'autres sont travestis ou délibérément coupés de leur origine?

Face à ces risques, les archéologues et les restaurateurs ont-ils une chance de contrôler les évolutions à venir? Programmation, définition des choix, développement de la recherche, amélioration des techniques, collaboration avec les musées sont indispensables mais ces efforts semblent bien insuffisants si l'on ne s'attache pas dans le même temps à la sensibilisation et à l'éducation du public⁽⁴⁾. Sa responsabilisation est un objectif prioritaire si nous voulons assurer la pérennité de ce patrimoine archéologique, dont nous pourrions n'être que les consommateurs éphémères mais dont nous savons qu'il est le tangible du passé, ce sur quoi peuvent se constituer l'Histoire, mais aussi la mémoire des hommes et leur conscience d'appartenir à un groupe qui les dépasse.

¹ Alain Schnapp, *La conquête du passé, aux origines de l'archéologie*, Éditions Carré, Paris, 1995.

² Philippe Ward, *The Nature of Conservation, a Race against Time*, ICOM International Institute for Conservation, The Getty Conservation Institute, Marina del Rey, 1986.

³ Voir Colin Pearson (éd. par), *Conservation of Marine Archaeological Objects*, Butterworths, Londres, 1988; Marie Berducou (sous la direction de), *La conservation en archéologie*, Masson, Paris, 1990 (adaptation et traduction en arabe en préparation à l'Institut Français d'Archéologie Orientale, Le Caire); Janey M. Cronyn, *The Elements of Archaeological Conservation*, Routledge, Londres, 1990; André Bergeron, France Rémillard, *L'archéologue et la conservation*, Les Publications du Québec, Québec, 1991; Karl Herold, *Konservierung von archäologischen Bodenfunden*, Böhlau, Vienne, 1994.

⁴ Marie Berducou, *La conservation archéologique*, in *L'archéologie aujourd'hui*, Hachette, Paris, 1980, p. 168.

⁵ «Le théoricien visionnaire et méconnu que fût le finlandais Tallgren n'écrivait-il pas dès 1939 que l'archéologie doit cesser d'être une science naturelle fondée sur l'étude des objets et des formes pour devenir une science économique, sociale et historique», Alain Schnapp, in *La conquête du passé, aux origines de l'archéologie*, op.cit., p. 324.

⁶ Le numéro 2 de la série «Cent objets disparus» de l'ICOM vient de paraître «*Pillage en Afrique*», 1994, 14 p.

⁷ L'ICCROM étudie actuellement un programme d'action pour la sensibilisation du public au patrimoine archéologique et s'oriente vers une cible privilégiée: enfants et enseignants.

The Conservator's Approach to Sacred Art

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Résumé

Cette série de courts articles qui reflètent les opinions sur la conservation d'objets sacrés est écrite par des restaurateurs professionnels de tradition culturelle différente, certains d'entre eux étant membres de communautés indigènes.

En ce qui concerne l'art ou les objets de peuples indigènes, les auteurs demandent au lecteur de prendre conscience du sens des mots tels «sacré» et «art» et d'être informé des valeurs traditionnellement défendues par les musées sur la signification d'une œuvre et comment elle devrait être traitée. Les peuples indigènes peuvent avoir d'autres raisons pour décider quels sont les objets significatifs et s'ils devraient être préservés et, dans ce cas, comment.

Tous les auteurs acceptent l'idée que les indigènes, détenteurs de leur patrimoine culturel, doivent jouer un rôle clé dans la préservation d'œuvres et de sites qui sont importants pour eux. Les conservateurs de musées cherchent à comprendre comment traiter l'art sacré en respectant les protocoles culturels propres à chaque communauté. Les restaurateurs qui travaillent sur ce patrimoine savent que la façon la plus appropriée de procéder pour résoudre un problème technique de restauration est de tenir compte autant des facteurs culturels que techniques ou matériels.

This topic has been approached as a forum: each author, a conservator, has written independently from her/his own perspective. It is interesting to note that similarities have emerged in the articles, for example on concerns such as cultural significance, respect, and the meaning of «sacred». The authors also have expressed individual viewpoints grounded in different experiences, conservation disciplines, geographical regions, and cultural perspectives.

Vicki Heikell, *Maori Paper Conservator, National Library of New Zealand: Te Puna Matauranga o Aotearoa, Te Whanau-a-Apanui tribal descent.*

What is sacred art? Who determines what art is sacred? For what reasons do they decide art is sacred?

As a Maori person, I prefer not to use the term «sacred» as this often suggests works are related to a Judaeo-Christian religion or mythology, works not linked to indigenous peoples. I prefer to view «sacred» (in Maori terms) as culturally significant. Culturally significant Maori works should be decided by Maori people. This seems to be a reasonable and logical view to take. However in our colonial past acknowledged 'experts' have often determined what is important about Maori people from historical (colonial), and aesthetic (colonial) considerations.

Traditionally those things seen as sacred are carvings and meeting houses which can be readily identified as part of a unique 'other' culture. While Maori people would not argue that these things are indeed significant, it is also true that Maori people view contemporary works as culturally significant because they demonstrate and illustrate the history of interaction between Maori and Pakeha (European New Zealanders). Non-Maori people do not often consider these works as being culturally significant to Maori people. Perhaps it is because contemporary things are not 'traditional', therefore cannot be 'sacred'.

As a paper conservator, I have been part of many Maori ceremonies relating to works on paper. Ceremonies have been conducted because a particular iwi (tribe) acknowledge the work as being culturally significant to them. The work may have been written by an ancestor, may depict an ancestor, may tell a story of an ancestor, or may relate a history of a tribal area. These ceremonies involve the same commitment, and command the same respect by Maori people as they would when dealing with 'traditional' treasures such as carvings and cloaks. As a Maori paper conservator I work in Maori communities promoting preventive conservation of works on paper and photographic materials. I carry out surveys of collections on marae (meeting place and associated meeting house), and provide remedial treatments on these works. In doing this work I acknowledge the customary rights and 'ownership' of these works. This means treatment decisions are based on priorities of the community.

What ethical dilemmas do I face? Where there may be ethical considerations, as a conservation professional, I must overcome this by providing all the options to Maori people. This takes the form of workshops aimed at

raising awareness of conservation and the reasons for it. By providing a conservation education programme I then give Maori communities an overview of what conservation is, and why we conserve things. When it comes time to make decisions, Maori people have all the options before them, and are able to make informed decisions. If after all the information has been given people choose not to have their works conserved then you should step back and let the 'owners' decide the future of their works. Always ask the question: why do you want something conserved? For if the people it relates to no longer feel it is necessary, then why do you? In order to develop an appropriate approach to conservation you must have dialogue and a partnership with the people who have cultural ownership of a work. This in turn builds trust between the cultural owners and the conservator.

It is also patronizing to assume that indigenous people necessarily believe that all their works should degrade and eventually return to the soil. Like other people, Maori wish to keep records of their achievements and history. Colonization brought new ways of record keeping, and Maori have adapted to new methods of communication – paper, pen, photograph. Maori people perceive the use of these media in a different way from other people which means that we as conservators may need different ways to approach the same conservation problem.

Dean Whiting, *Maori Buildings Conservator, New Zealand Historic Places Trust: Pouhere Taonga, Te Whanau a Apanui tribal decent.*

The conservation of Maori Buildings has developed in New Zealand out of both a cultural base and a European conservation philosophy. Maori history is carried in material culture but also in spiritual and cultural mediums. They are all dependent on one another and important to sustaining Maori as a people. To conserve the material culture requires an understanding and participation in the culture itself to ensure the maintenance of all values and relationships significant to an object or structure.

The New Zealand Historic Places Trust / Pouhere Taonga has been able to develop an approach to conserving the built history of Maori, with Maori. A programme began in the 1980's providing conservation workshops to Maori

communities carrying out restoration of ancestral buildings and structures. The professional conservators involved found they had to recognize and preserve the relationship Maori people had to their cultural material as well as retain the material information held in the structures, sites, and objects. The exchange of ideas and approaches started the development of a conservation process that Maori could control and utilize. This required the formal training of Maori individuals in the technology of conservation to enable them to interact and develop approaches with Maori communities.

Today there are Maori people working in conservation that have acquired the qualification of conservator. These conservators are now being asked by their people to help define the peculiar mix of cultural preservation and conservation philosophy to produce policy and charters that will help guide conservation within tribal and national contexts. The conservation of Maori cultural material has therefore found a degree of acceptance and relevance that will continue as long as Maori have a role in the development, decision making, and implementation processes.

Miriam Clavir, *Conservator, UBC Museum of Anthropology, Vancouver, Canada*

Conservation codes of ethics in many countries refer to the goal of respecting and retaining the culturally significant qualities of the objects and works of art in collections. For Canadian as with other ethnographic museums, the authority to define which qualities are culturally significant is being recognized as belonging first to the originators of the objects, the First Nations, rather than to the museum or art curators and catalogues.

It should be noted that important cultural significance may well be attached to pieces which in museums have been called «utilitarian», as well as to those considered «sacred». In one Canadian example, a particular canoe was designated as very important to its originating community because it was now the only one left. Personal significance also commands respect: a man's tools or a woman's utensils may have had prohibitions as to who could touch, view or use them; the originating culture may wish these traditions to be carried on. It is often emphasized that objects in collections today are still part of the identity of living cultures who actively continue to use and pass on to their children the cul-

tural knowledge which contextualizes the objects, which restores the objects' cultural significance.

Conservation codes of ethics state the obligations for an ethical relationship between the conservator and the owner of a work. For works which are indeed 'sacred', 'potent', or 'culturally significant', whichever the appropriate term is, conservators must recognize the dimensions of both moral ownership and current legal ownership.

The following points, then, require consideration:

1. Objects which museums have not traditionally categorized as «sacred» and «art» may need to be regarded with the same respect accorded to those pieces.
2. If the ultimate goal of «proper care and conservation» includes preserving cultural significance, then conservators need to include prominently in their decisions the intangibles associated with an object, expanding conservation's more usual worldview of «proper care» meaning proper physical care.
3. What is scientifically the best way to proceed in the care and conservation of collections may not be the most appropriate way. Conservators are a resource of expertise with responsibilities to collections and to people, but there are those from outside the profession who need to be recognized as having authority in areas relating to the preservation of the object or site. The ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value provides an excellent example of the recognition of the rights of indigenous peoples in the preservation of their material heritage.

Nancy Odegaard, *Conservator, Arizona State Museum, University of Arizona*

In recent years, the development of new legal regulations and changing social attitudes have begun to influence the approach conservators take in the care and treatment of cultural property. Among conservators, much discussion has been directed to the category labeled «sacred» art.

In 1990 the US Congress enacted Public Law 101-601 or The Native American Graves Protection and Repatriation Act (NAGPRA) which legally defines Sacred as «specific ceremonial objects which are needed by traditional Native American religious leaders for the practice of traditional Native American religions by their present day adhe-

rents». Under NAGPRA regulations, human remains and associated funerary objects are inventoried, and written summaries of unassociated funerary objects, sacred objects and objects of cultural patrimony are completed by museums. The documents are distributed to the appropriate indigenous groups. The use of tribally designated cultural advisors is encouraged.

In the United States, for the conservator, an approach to take with possible sacred art may begin with its legal status. Because of NAGPRA certain cultural materials may be:

1. Claimed (by lineal descendants or tribes if cultural affiliation has been established) and returned. These materials are then no longer under the museum's jurisdiction and further care and preservation of them are not the conservator's responsibility. The conservator may however be asked to:
 - assist in packaging the material for safe return or
 - provide information or assistance to the claimants about preservation or conservation related activities.
2. Claimed and then transferred to another tribal museum repository for curation. Again the conservator may be asked to assist in the above areas.
3. Claimed, but remain in the museum until a later time. These materials are no longer legally owned by the museum but may be housed there. The care and preservation of these materials should be specified in a Curation Agreement and any conservation treatments should be approved in writing. The conservator may be asked to:
 - assist in the development of appropriate storage locations, housings/supports, and condition surveys for objects or
 - facilitate access to or use of the collections or
 - facilitate the use of objects in blessings.
4. Non-claimed objects or objects claimed but not specified for repatriation. These materials, whether or not they are sacred, may require specialized care that would normally go beyond the expertise of the typical conservator. In addition to the activities mentioned above there may be:
 - particular storage needs that require
 - separation of the objects from other objects
 - separation from objects of other cultures
 - housings and barriers that do not seal completely

- placements that are specific to direction, height relational to ground level, and position or proximity to other cultural objects.
- scheduled access for feeding or blessing
- access for activities which go beyond viewing, such as use.
- particular loan agreements.

Guidelines that may help conservators design an approach to the care and preservation of sacred or sensitive objects in museum collections include the following:

- Conservators should understand the legal status of the collection they are asked to work with.
- Conservators should seek the advice and interaction of tribally designated cultural advisors so that they may avoid the use of inappropriate materials or techniques.
- Conservators should be cautious in implementing advice that is not specific and with cultural affiliation.
- Conservators should be respectful of indigenous traditions that affect the care and preservation of objects.

Marian A. Kaminitz, Chief Conservator, National Museum of the American Indian, Smithsonian Institution in New York

What is sacred art?

Sacred art may be material that is designated or elevated to a special or ceremonial usage for a particular event. That event, however, may occur rarely or it may occur daily. If 'sacred' indicates 'sensitive', the items may be segregated, restricted, or off-limits to certain groups according to gender, level in the community in which the items are used, or age group (pre-pubescent vs. adults or uninitiated vs. initiated), or specific group within the community – such as a ritual society in which designated groups hold specific privileges, rights to perform specific ceremonies, acts, or rites with specific objects, items, and paraphernalia/ regalia.

Sacred art is anything that is imbued with a special significance other than that of the ordinary. Sacred may be viewed by some as that which exceeds the mundane. Or it may be considered to be everything, because everything was created by a divine being such as 'The Creator' or 'God', and is therefore imbued with the divine, sacred, spark of 'The Creator'. This is as much a function of religious beliefs or life ways held by a particular group

as it is of individual ceremonies alone.

Sacred and the interpretation of this term varies from culture to culture throughout the world to such an extent that it can be conceivably all encompassing of everything in a society, or it can be relegated to a very few individual items.

In Christianity, a piece of the true cross, of the Lost Ark of the Covenant, or of the Holy Grail, may be considered more sacred than a printed Bible by some or may be considered equally sacred by others. Or is it that at this time one is more rare than the other and therefore more sacred (art market terms)? If there were only one copy of the Bible or if it were the first copy of the Bible, would it have as high or higher a ranking? Is its worth in terms of rarity the same as its worth in terms of sacredness?

Just as in some communities there are items which have particular levels of sacredness or holiness, so there are levels of restriction of audiences to these items; these therefore become yet another way to designate the 'sacredness' of an item within a society.

Context is yet another term that is important when determining sacredness. Some items such as a particular bowl or spoon are considered sacred specifically when functioning in the context of a ceremony, but at the conclusion of the event, the items are returned into normal service, the everyday functioning of life.

Availability: «sacred» may mean accessible or inaccessible depending on the culture. Context is an important part of this as well. Does an ecclesiastical robe or vestment or painted triptych of a biblical scene retain its sacredness in a secular context? Once it's in a museum setting, is it unapproachable by inappropriate parties (non-clergy)? This question, applied to cultural materials of Native Americans, will probably not have the same answer. These factors vary from group to group and individual to individual.

So what do we do as conservators who have the responsibility of caring for these objects in museums? Well, the first thing we try to do is ask. Since there is no way we can presume to possibly know the intricacies and subtleties of cultures outside of our own, we humbly and respectfully ask those who are of that culture and do know. In the case of Native American cultures at the National Museum of the American Indian (NMAI), there are sometimes many spokespeople and so-

metimes very few or none at all. At NMAI, we are beginning to put together information obtained from tribal visitors, including appropriate individuals to contact, handling needs for sensitive objects, and traditional care requirements. This will enable us to make informed decisions for our collections and allow us to contact the appropriate people as issues arise.

Principal international Organisations Concerned with the Preservation of Cultural Property

Janet Bridgland
Consultant

THE INTERNATIONAL COUNCIL OF MUSEUMS (ICOM)

ICOM was created in 1946 as an international non-governmental organisation devoted to the promotion and development of museums and the museum profession at the international level.

The 10,000 members of ICOM in 120 countries represent an active network of international cooperation (70% in Europe). They collaborate in the regional or international activities of the organisation: workshops, publications, training, collaboration through yearly meetings of ICOM's 25 International Specialised Committees.

ICOM's goal is to respond to the problems and needs of the museum profession. Its activities are focussed on the following themes: reinforcement of regional cooperative networks; professional training and exchange; promotion of professional ethics; fight against illicit traffic of cultural property; and protection of world heritage.

ICOM maintains close links with UNESCO and carries out part of its programme for museums.

Address: Maison de l'UNESCO, 1 rue Miollis, 75732 Paris, Cedex 15, France.
tel 33 (1) 47.54.05.00; fax 33 (1) 45.06.78.62
Secretary-General: Mme Elisabeth des Portes

ICOM COMMITTEE FOR CONSERVATION (ICOM-CC)

The Committee for Conservation was established in 1967 as an International Specialised Committee of ICOM. It currently has over 900 members in 72 countries.

Its aims are to provide a framework within which conservation specialists can meet and work on an interdisciplinary level; to promote and maintain the highest standards of conservation practice; to promote scientific research; to collect and disseminate information; and to foster an awareness within the museum community and the general public of the need to safeguard the cultural heritage.

The Committee's research programme is carried out through its 21 Working Groups which address broad topics such as training and preventive conservation as well as specific types of movable cultural property. ICOM-CC holds a Triennial Meeting to report on developments in all sectors of the field. It publishes Triennial Meeting Preprints, a Committee Newsletter, and Working Group Newsletters and Reports.

Address: Chairs Institution
Université Libre de Bruxelles,
Av. F. Roosevelt 50 (Faculté Philosophie et
Lettres - C.P. 175) B-1050 Brussels, Belgium.
tel. 32 (2) 650.24.66; fax 32 (2) 650.45.49.
Chair: Mme Catheline Périer-D'eteren

INTERNATIONAL CENTRE FOR THE STUDY OF THE PRESERVATION AND THE RESTORATION OF CULTURAL PROPERTY (ICCROM)

ICCROM was established by Unesco in 1959 as an autonomous scientific intergovernmental organisation. It currently represents more than 90 Member States and has nearly 100 Associate Members worldwide.

Its functions are: to collect and disseminate documentation concerned with scientific and technical problems of the preservation and restoration of cultural property; to promote research in this field by means of commissions or bodies of experts, international meetings, publications and exchanges of specialists; to give advice and recommendations on specific points concerned with the preservation and restoration of cultural property; to assist in training and in raising the standard of restoration work.

ICCROM's activities include a library and documentation service, a publications programme, the training of specialists, preparation of teaching mate-

rials, organisation of technical meetings and the promotion of research.

Address: Via di San Michele 13, 00153 Rome, Italy.
tel 39 (6) 587-901; fax 39 (6) 588-4265.
Director: Marc Laenen

INTERNATIONAL INSTITUTE FOR CONSERVATION OF HISTORIC & ARTISTIC WORKS (IIC)

IIC is an international professional association that was established in 1950 to promote the knowledge, methods and working standards needed to protect and preserve historic and artistic works. Membership is open to restorers and conservators in museums and in private practice, conservation scientists, educators and students as well as collections managers, curators, art historians and others who wish to be informed of developments in the field. It has approximately 3600 members in 78 countries.

IIC organises international congresses at two-year intervals on specific topics of current interest, with papers commissioned from leading specialists in the chosen field. Regional groups of IIC exist in several countries. IIC publications include: *Studies in Conservation*, a bi-monthly Bulletin, *Art and Archaeology Technical Abstracts (AATA)*, in association with the Getty Conservation Institute), edited *Preprints* of its international congresses and a biennial *List of Members*.

Address: 6 Buckingham Street, London WC2N 6BA, United Kingdom.
tel 44 (71) 839-5975; fax 44 (71) 976-1564.
Secretary-General: David Bomford

INTERNATIONAL COUNCIL ON MONUMENTS AND SITES (ICOMOS)

Founded in 1965 under the aegis of UNESCO, ICOMOS is the only non-governmental organisation that works to promote the application of theory, methodology and scientific techniques to the conservation of architectural heritage.

Its activities are based on the doctrine contained in the International Charter on the Conservation and Restoration of Monuments and Sites, more commonly known as the Venice Charter.

ICOMOS provides an international forum for professional dialogue and exchange; collects, evaluates and disseminates information on conservation principles, techniques and policies; fosters the adoption and implementation of international policies on the conservation and enhancement of architectural heritage; assists in organising training programmes for con-

servation to specialists worldwide; and provides international expertise. It also advises on and monitors properties on the World Heritage List.

Address: Hôtel Saint-Aignan, 75 Rue du Temple, 75005 Paris, France.
tel 33.1.42.73.35.76; fax 33.1.42.75.57.42
Secretary-General: Prof. Jean-Louis Luxen

THE GETTY CONSERVATION INSTITUTE (GCI)

The Getty Conservation Institute was established in 1982 as an operating program of the J. Paul Getty Trust, a private, non-profit foundation.

The GCI seeks to increase awareness and respect for all cultural heritage, regardless of its place of origin; to provide relevant information to those responsible for conservation policies and practices; and to develop, apply and make available appropriate solutions to conservation problems. It contributes to scientific knowledge and professional practice through projects addressing preventive and remedial conservation of objects and collections, monuments and sites, and historic structures and cities.

The Institute's activities include scientific research, training, field-work, and information exchange. Its publications include meeting proceedings, a *Research in Conservation* series, *AATA* and *Conservation, the GCI Newsletter*.

Address: 4505 Glencoe Avenue, Marina del Rey, California 90292, USA tel 1 (310) 822-2299, fax 1 (310) 821-9409
Director: Miguel Angel Corzo

EUROPEAN CONFEDERATION OF CONSERVATORS' ORGANIZATIONS (ECCO)

ECCO was created in Brussels in 1991 to develop and promote the conservation and restoration of cultural property at the practical, scientific and cultural level. Through its member organisations, it represents 4,000 professional conservator-restorers from the countries of the European Union and the AELE.

Its aims are to promote the highest standards of conservation practice, research and training and to achieve legal recognition of the profession based on criteria elaborated in the document «Professional Orientations, the Profession, its Code of Ethics and Training», adopted by ECCO in 1995.

Address: Pierre Masson, Vice President,
Diepestraat 18, B-3061 Leefdaal, Belgium.
tel/fax 32 (2) 767.97.80

Europa Nostra (1965) and the International Castles Institute (1949) were merged in 1991 to form a pan-European non-governmental organisation whose aims are to encourage the protection and enhancement of the European architectural and natural heritage, high standards of architecture and of town and country planning; and the improvement of the European environment in general.

In support of these aims, Europa Nostra seeks to influence public opinion and international, national and local bodies and authorities through conferences workshops, resolutions, exhibitions, publications, study tours and scientific studies.

Address: Lange Voorhout 55, 2514 EC Den Haag, The Netherlands.
tel 31 (70) 356.0533; fax 31 (70) 361.7865
Secretary-General: Lester Borley

Suggested further reading - Bibliographie sélective

Nicholas Stanley Price

The following titles will provide an introduction to the theory and practice of conservation.

Les ouvrages mentionnés le sont à titre d'introduction à la théorie et à la pratique de la restauration.

Marie Cl. Berducou.

La conservation en archéologie. Méthodes et pratique de la conservation-restauration des vestiges archéologiques, Paris, Masson, 1990.

Cesare Brandi.

Teoria del restauro, Torino: Einaudi, 1977.

Colette Di Matteo.

«Restauration des oeuvres d'art», dans *Encyclopedia universalis*, volume XV, Paris, 1987.

Histoire de la Restauration en Europe, Actes du Congrès International "Histoire de la Restauration", Interlaken 1989, vol. I, Worms, Wernersche Verlagsgesellschaft, 1990.

Andrew Oddy, ed.

The Art of the Conservator, London, The British Museum, 1992.

Paul Philippot.

Pénétrer l'art, restaurer l'oeuvre: une vision humaniste. Hommage en forme de florilège (C. Périer-D'Ieteren, éd.), Courtrai, Groeninghe Eds., 1989.

«Preserving World Art», in *World Art. Themes of Unity in Diversity, Acts of the XXVIth International Congress of the History of Art*, (Irving Lavin, ed.), vol. III, part VII, 1986, pp. 797-895.

Carolyn L. Rose and Amparo R. de Torres, eds.

Storage of Natural History Collections: Ideas and Practical Solutions, Society for the Preservation of Natural History Collections, 1992.

Science, Technology and European Cultural Heritage. Proceedings of the European Symposium, Bologna, Italy, 13-16 June 1989, (N.S. Baer, C. Sabbioni, A.I. Sors eds.), Oxford, Butterworth-

Heinemann Ltd, 1991.

Catherine Sease.

A Conservation Manual for the Field Archaeologist, Los Angeles, University of California at Los Angeles, 1992.

Garry Thomson.

The Museum Environment, 2nd edition, London, Butterworth, 1994.

Philip Ward.

The Nature of Conservation: a Race against Time, Los Angeles, The Getty Conservation Institute, 1986 (available also in French and Spanish).

Current work in conservation is reported in a number of journals including *Studies in Conservation* (published by the IIC, London), and in the preprints of the biennial conferences of the IIC and of the triennial meetings of the ICOM Committee for Conservation. A fundamental source of reference is the *Art and Archaeology Technical Abstracts (AATA)*, published semiannually by The Getty Conservation Institute in association with the IIC.