

INTERNATIONAL CENTRE FOR THE STUDY OF THE PRESERVATION AND THE RESTORATION OF CULTURAL PROPERTY NEWSLETTER 14

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annual bulletin



ICCROM

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EDITORIAL

Sir Bernard Feilden, Director Emeritus, has kindly contributed the editorial for Newsletter 14.

He is the author of Conservation of Historic Buildings, published in 1982, and has recently finished another book entitled Between Two Earthquakes.

He was director of ICCROM from 1977 to 1981, and remains in close contact with the organization, lecturing in the course on Architectural Conservation and representing ICCROM in his many missions around the world. We are most grateful for his continued support.

Cevat Erder
Director

PERSPECTIVES ON ICCROM TODAY

This year, I have the honour to follow the precedent that former directors write an editorial for the ICCROM Newsletter.

First, as an architect I would like to say how much I have learned from my work for ICCROM and how working for ICCROM demanded everything I knew. I think ICCROM extends and enlarges the perspective of everyone who comes to Rome. One also learns from executing missions: first one must try to relate to the culture of the host country, so a visit to the principal museum is essential. As Paul Philippot said, "Conservation is a cultural problem before it becomes a technical one". The infrastructure of knowledge created by archaeology, art and architectural history is the essential basis for understanding the significant values of a building. It is only when you cannot find this knowledge that you become truly conscious of its importance.

One cannot diagnose the faults in a building until one understands the climate, even its microclimate. Carrying out missions for ICCROM teaches the fundamental importance of climate to a building and its contents - especially if the building is a museum.

ICCROM also teaches the importance of multidisciplinary work, which means we must get scientists into the field and conservators into the laboratories. We have to learn to ask the right questions. We also have to learn how the other members of the conservation team think and work. ICCROM is a unique international resource, but what is it? It is more than the core in Rome, essential though this small body is. The staff have immense responsibilities worldwide and have acquired a great reservoir of knowledge, but they are so few that they cannot really tackle the immense problems in the world. The core supports and coordinates a large number of Associate Members who form a global network that is ever-expanding. A large number of world-class experts come to Rome to lecture. They virtually give their services to ICCROM because it is a centre of excellence and because it is stimulating to lecture to the international groups of participants who follow

the courses. These experts can also be asked to execute missions. Such missions always present a challenge to the expert; nevertheless, they widen his experience which he can then pass on to the course participants.

But ICCROM is more than the core staff, the associated institutions and experts. It also embraces nearly 2,000 past participants, who have immense potential in their own countries. Indeed some of the early participants are now directors in state conservation services and are able to influence the policy of their governments. The influence of ICCROM will continue to grow.

The essential role of ICCROM is described in the statutes as teaching, documentation, research and missions. ICCROM has been hampered in fully achieving this role, especially in the field of research, by lack of space and lack of funds. The Italian Government is soon to provide the space by making the promised two additional wings of San Michele available. This has become doubly urgent because the present building, designed only for domestic loads, has been grossly overloaded and is showing signs of fatigue. Engineers have warned that part of the first floor can only carry 100 kg per square metre, so equipment has had to be moved. The library has continued to expand, as it must, but books, which are very heavy, must be stored on the ground floor. The sooner the upper floors with domestic loadings can be evacuated the better. Then they can be used for much-needed accommodation for participants.

The need for funds is equally urgent, especially because the devaluation of the dollar has cut the money available for the budgeted programme by 40%. An international fund-raising operation has been initiated by the Council, and will need active support in every country. It should be supported because ICCROM does an amazing amount of work for very little money: in short it is a cost-effective organization — a unique world cultural resource.

Conservation of cultural property has, in fact, a long history. One can identify the antiquarian phase in the Renaissance, the archaeological phase with the Enlightenment, the revivalist art-historical phase with the Romantic Movement, followed by the scientific phase. ICCROM was founded by such great men as Harold Plenderleith, Paul Coremans, Piero Gazzola and Hiroshi Daifuku to promote the study of the preservation and restoration of cultural property by scientific means.

Conservation is now a world-wide movement involving the natural environment as well as cultural property. It is motivated by the realization that the resources of the space ship called Earth are not inexhaustible. This movement is now becoming a political force and is spreading from the developed countries to those classified somewhat arbitrarily as developing countries. In my opinion these developing countries need the philosophy of conservation as

much if not more than the developed countries, as they could thereby avoid the mistakes inherent in rapid industrialization, destruction of forests, pollution and dangerous changes in the environment. This requires understanding and skill in management. Indeed human survival now depends on intelligent management of our ecosystem; likewise the survival of cultural heritage, which is not being replaced, depends on management, so conservators must work with administrators to achieve this objective.

The next phase in which ICCROM should take the lead is promoting the skills that manage cultural property, so preventing decay by eliminating the causes. It is a major task, beginning with making schoolchildren aware of their heritage and their environment. Sensitization of the public is essential because ultimately the means of action depend on wide support. Unfortunately, visual education is sadly neglected in the modern education.

The basis for management of our cultural heritage is documentation followed by regular inspections and formal reports which divide the actions necessary into categories, such as Immediate, Urgent, Necessary, Desirable and Monitor. On this basis a maintenance strategy can be evolved which will prevent decay and enable governments to assess the means required to conserve our cultural patrimony. There is an illusion that conservation is expensive. Yet in my experience, confirmed by the cases of Over Bridge and the City of Chesterfield in England, when conservation factors are introduced early enough into the planning process they can save millions of pounds. The historic churches in England are subject to a regular inspection schedule, which has led to a dramatic reduction in real terms of the cost of caring for them. The trouble is that people do not see the money that has been saved and grudge the professional fees for skilled conservators.

The essential role of ICCROM is to promote the art and science of conservation and help the profession of conservator/restorer gain deserved status and recognition. We must therefore explore every possibility of promoting this objective because in the end it means more cultural heritage will be preserved.



Sir Bernard Feilden, Director Emeritus of ICCROM.

ADMINISTRATION AND ORGANIZATION

XV GENERAL ASSEMBLY

ICCROM's biennial General Assembly will be held on 9-11 May 1988. Member States are invited to send delegates, and Associate Members are entitled to send observers.

After seven fruitful and challenging years as director of ICCROM, Cevat Erder will be returning to his post as a professor at Middle East Technical University, Ankara. METU granted him a leave of absence for this period, which has now expired. Prior to the Assembly, the Council will review all the applications, interview the final candidates, and recommend its findings to the Assembly in May. The incoming director will take over in July 1988.

MEMBER STATES

We are pleased to announce that three new countries became Member States of ICCROM in 1987, bringing the total number to 78. They are Greece (17 March), New Zealand (19 March) and the Socialist Republic of the Union of Burma (5 October).

ASSOCIATE MEMBERS

The following institutions were accepted as Associate Members in 1987:

- Atelier du Patrimoine de la Ville de Marseille, France;
- Computational Mechanics Institute, Southampton, United Kingdom;
- International Center for the Research and the Application of Earth Construction (CRATerre), Villefontaine, France;
- Graduate Program in Historic Preservation, University of Pennsylvania, Philadelphia, Pennsylvania, U.S.A.;
- International Association for the Conservation of Books, Paper and Archival Material (IADA), Vienna, Austria;
- New-York Historical Society, New York, New York, U.S.A.

PREMISES

Restoration of New Premises

Work proceeded during the year under the supervision of the Soprintendenza dei Beni Architettonici: in the south wing, structural consolidation was completed, all floors redone, and staircases built. The east wing (on the Tiber) now has windows, shutters and external rendering. The building and installation of technical services are scheduled to begin in 1988.

Maintenance and Improvement of Existing Premises

Some improvements were made in ICCROM's current premises in San Michele. These include a new basement storeroom for books and paper, new electric wiring and



Cevat Erder, outgoing Director of ICCROM.

earthing of all exhibition structures, and relocating the photocopy machines to a structurally safer area. The rather outdated heating plant was repaired to comply with safety regulations; radiators were cleaned and supplied with proper pressure valves. Electric wiring was upgraded, and cork-vinyl tiles were installed in another area of the second floor.

Review of Computing

A major review of computing in ICCROM has been carried out, with information collected and examined on the various systems now in use, including the library, administration, and word-processing equipment throughout the building. Issues of hardware and software choices, maintenance, training, database management and interactions with the Conservation Information Network were discussed. Recommendations for adoption of a uniform operating system and changes in specific sectors of information management have been made.

PERSONNEL

ICCROM welcomes new staff members:

- Muriel Dumaine was employed on 1 February as Assistant Secretary to the Director, on a two-year fixed-term contract.
- Rodolfo Luján was employed on a two-year fixed-term contract on 1 July as *ad interim* Coordinator of the Mural Paintings Course. He is filling the post of Paul Schwartzbaum, who is on extended leave of absence.
- Duane R. Chartier was employed on 15 September as Scientific Programme Coordinator on a two-year fixed-term contract.

Departures

- Sandra Maillard, employed as Assistant Secretary to the Director, resigned and left ICCROM on 31 January.
- Christina Huemer, employed as Assistant Librarian, left ICCROM on 30 September at the end of her two-year fixed-term contract.

COURSES



ICCROM course participants and staff.

TRAINING AT ICCROM

Architectural Conservation - ARC87

The course was attended by 20 students from 17 countries, with five additional observers. It was coordinated by Jukka Jokilehto, with the assistance of Alejandro Alva, Jeanne-Marie Teutonico (laboratory exercises) and Roberto Marta (field work).

Due to budget cuts, radical changes had to be made with respect to lecturers and other expenditures. This was possible thanks to the good will of the lecturers, some of whom were able to have their travel expenses subsidized, and partly thanks to a more extensive use of in-house staff, both in lectures and in the field. The changes were also taken as a challenge to improve the course structure and further clarify its schedule.

There was a programme of guided visits to the city of Rome, the 'Ara Pacis' and the Mausoleum of Augustus, the Istituto Centrale del Restauro (ICR), and the quarries and workshops of Marino and Tivoli.

In late May, a one-week seminar on urban and territorial conservation was organized in the city of Ferrara, coordinated as in previous years by Carlo Cesari, Head of the Office for the Historic Centre. Part of this seminar included visits to historic centres around Ferrara, where staff and participants were guests of numerous public and private institutions.

Special attention has been given to the preparation of didactic material that could be made available to other training centres in the future. These include a laboratory manual and video recordings of selected lectures.

Rome University Architectural Conservation Course

The regular courses of the Scuola di specializzazione per lo studio ed il restauro dei monumenti continued under the direction of Gaetano Miarelli-Mariani and the Council of the School. In the academic year 1986-1987, the two-year, postgraduate course (in Italian) consisted of two groups: 36 first-year and 35 second-year participants. Most of the participants were Italians, but there were also a few with degrees from abroad. The programme was coordinated by Stefano Marani, assisted by Franca Iole-Pietrafitta and Bruno Menichelli. The Director of ICCROM was invited both to lecture to the courses and to attend the evaluation of dissertations.

Conservation of Mural Paintings — Regional Course in Latin America

The course was held from 4 September to 30 October in Bogota, Colombia. It was organized by ICCROM in collaboration with the UNDP/Unesco Regional Program (Lima, Peru), and the National Centre for Restoration of COLCULTURA, Bogota, with a financial contribution from the World Monuments Fund in New York.

This was ICCROM's second experience in exporting the course, the first having been in 1980 in Thailand. This time, the general structure followed the Rome version more closely, and proved to be very successful. It was also addressed to a whole region: the Caribbean, Central and South America. Eight countries were represented by sixteen professionals chosen from a large pool of applicants.



Participants in the Regional Mural Paintings Course, Bogota.

The course, held in Spanish, allowed the participants to study "in situ" conservation methods, materials and theories adapted to the special conditions of the Latin American region, where conservation professionals are very few and overworked, necessary products are difficult if not impossible to obtain, and the importance of conservation is sometimes overlooked.

The course was divided into two sections: the first six weeks in Bogota at the Santa Clara National Centre for Restoration, and the last two weeks in Medellin at the House Museum of the painter, Pedro Nel Gomez. Participants followed theoretical lectures and practical demonstrations and performed laboratory analyses and microscopic observations. Three worksites were carried out, two on secco mural paintings of the Colonial period and one on a modern mural painting in Medellin. Study tours were also organized to worksites and restored monuments and to well-preserved examples of Colonial towns. Each participant gave a presentation on mural paintings and conservation problems in his or her own country. Weekly meetings with lecturers and coordinators helped in the exchange of information and positive development of the course. Another important benefit of the experience was that the participants learned more about ICCROM as a resource to support them in their work.

Scientific Principles of Conservation — SPC87

The course was held from 12 February to 5 June with 18 participants from 15 countries. It was given in English and followed a programme similar to that of the previous year. In addition to visits to laboratories in Rome, two study tours were organized, one to laboratories and restoration centres in Bologna, Ferrara, Florence and Venice, the other to Naples, Pompeii and Paestum.

In Rome, close contact was maintained with the ICR, especially the stone, ceramics and textile departments, as well as the Istituto Centrale per la Patologia del Libro. The Museo Pigorini again allowed its galleries to be used in a study exercise by the participants.

COURSES

The course was coordinated by Nicholas Leto, with the assistance of Bettina Elten, both of whom did an excellent job in taking over their tasks at the last moment.

Review and Revision of SPC Course

Following the arrival of Dr Duane R. Chartier, the new Scientific Programme Coordinator, the course was reviewed as a basis for restructuring and updating the course to better meet the changing needs of conservators. Course evaluation has been built in as a weekly feature. The evaluation of both students and lecturers will be computer-tabulated in order to start to collect detailed and somewhat objective data that will allow relevant alterations in the course in the future.

Seminar on Teaching Skills and the Use of Teaching Materials

As has become customary in early June, there was a one-week course for teachers led by Robert Ferguson of the Institute of Education, University of London. Eleven people attended, all involved in teaching conservation of cultural property.

Preventive Conservation in Museums — SEC87

Organized by Gaël de Guichen in collaboration with Marina Regni, Anna Stewart and Maria Valys, the 13th session of this course was given in French from 22 September to 9 October with 12 participants from 6 countries. Two participants were unable to attend at the last minute due to unforeseen circumstances.

Severe budget cuts were met by limiting the number of lecturers to three and postponing the production of didactic material. A new lecturer was Jean-Jacques Ezrati of the Bureau technique of the Direction des Musées de France, who taught the section on lighting.

The SPC87 group on a field trip.



PREMA 86-87 — Preventive Conservation for Technicians/Conservators working in African Museums South of the Sahara

PREMA is the principal outcome of the work undertaken since 1981 to implement a programme for conservation of movable cultural heritage in sub-Saharan Africa. Specialists agree that the cultural patrimony of African countries is greatly endangered. Written documents are scarce, oral traditions are dying with the advent of industrialization, and thus physical artifacts remain virtually the sole channel of knowledge of African cultural heritage. Yet many objects never reach a museum due to poaching; those that do arrive are still threatened by unfavourable climatic conditions and infestation, as well as lack of proper maintenance. Trained museum personnel are therefore essential — men and women with a consciousness of their past and with a sound understanding of the appropriate methods and techniques available for protecting their collections. The course was aimed at helping to create this urgently-needed core of qualified African museum conservators.



Countries participating in PREMA 86 and 87.

In its structure and scope, PREMA was a major departure in ICCROM's course traditions. For the first time, an eleven-month, university-level course, aimed at only one continent and fully financed by external participation, was organized.

The '86 version was addressed to French-speaking countries. The 12 participants were employees of their national museums and had an average of seven years' working experience. After 10 months of intensive course work in Rome, the group departed on a study tour, visiting ethnographic museums in Neuchâtel, Geneva, Basel, Tervuren and Paris, where they were most warmly received. The



PREMA 86 ended in July with the awarding of diplomas at the University of Paris I - Sorbonne.

course officially closed in the Amphitheatre Richelieu of the Université de la Sorbonne-Paris I, where eight participants were awarded diplomas for successful completion of the programme. In addition to the course coordinators, C. Erder and E. Greenway were also on hand for the ceremony.

PREMA 87

Part Two of the PREMA course began on 1 September 1987 and will last until 31 July 1988. This session has 11 participants from the national museums of 11 English-speaking countries in sub-Saharan Africa.

Funding this year was provided by Unesco, the Ministries or Departments of Cooperation of Great Britain, Norway and Sweden, the Ford Foundation, Skaggs Foundation and the Getty Trust. The University of Paris has agreed to enrol the participants as auditors, and they will receive an ICCROM certificate on successful completion of the course.

As for PREMA 86, ICCROM has received assistance from the University of Paris for academic supervision, the Pigorini Ethnographic Museum for practical work with the collections and classroom facilities, and Intercultura for housing and hospitality in Italy.

The course benefitted from the experience acquired during PREMA 86, and several modifications were made to the programme, including even greater emphasis on preventive collections care.

In addition to six continuing lecturers from last year, there are eight new lecturers, thus expanding the pool of faculty for future programmes.

PREMA 87



COURSES

COURSES



PREMA course participant receives his diploma at the Sorbonne, Paris.

PREMA 87 Participants:

J. ANSAH, Ghana
C. CHIPFUYA, Zimbabwe
R. KICHINJA, Zanzibar
M.R. LUHILA, Zambia
K. MARCOS, Ethiopia
E. MMBANDO, Tanzania
D. MUMBA, Malawi
M. OPUANA, Nigeria
C. SEBOLE, Botswana
J. SSEBADDUKA, Uganda
M. WAZWA, Kenya

PREMA 87 Staff:

ICCROM:

G. DE GUICHEN, Coordinator
C. ANTONARCHI, Assistant Coordinator
B. COQUILLE, Assistant
M. WAZWA, Assistant

Pigorini Museum:

A. ANTINORI

M. BISCIONE
B. FOSSA

University of Paris:

M. BERDUCOU
D. GUILLEMARD

Lecturers:

A. BALAZSY
National Centre of Museums, Budapest, Hungary
A. BAKKEN
Ethnographic Museum, Oslo, Norway
B. BARCLAY
Canadian Conservation Institute, Ottawa, Canada
J. BLACK
Conservation Department, Institute of Archaeology, London, U.K.
E. GRANQVIST
Zoological Museum of Helsinki University, Finland

F. GREENE
Glenbow Museum, Calgary, Canada

J. JOKILEHTO

ICCROM

M. MCCORD

British Museum, London, U.K.

E. PYE

Conservation Department, Institute of Archaeology, London, U.K.

P. RAVENHILL

National Museum of African Art Smithsonian Institution, Washington DC, U.S.A.

M. SIMPSON

Textile Conservation Centre, Hampton Court Palace, London, U.K.

S. WALSTON

Australian Museum, Sydney, Australia

C. WHEATLEY

National Maritime Museum, London, U.K.



The Paper Conservation Course visiting the library at Farfa Abbey.

Conservation of Paper

This course was offered for the second time from 21 September to 13 November. It was intended for mid-level professionals, and emphasized the problems of preserving archival material.

The course, in English, was attended by 12 participants from 11 countries, and was coordinated, as in 1985, by Christine Borruso (DEU) and Paul Schwartzbaum. The assistants were Rebeca Elguezabal (MEX) and Gerhard Banik (AUT), both course participants in 1985.

The teaching staff was composed of a group of eight international experts, who gave formal lectures and supervised practical work during the eight-week programme. The following topics were covered: cellulose chemistry and chemical identification of materials; history of paper and design materials; Western methods for conserving works of art on paper; innovations; conservation of archival paper; climatology for paper; Japanese methods for conserving oriental paper objects; conservation of photographs.

Since this course required special facilities, which at present ICCROM does not possess, the course was held in a small lab which was adapted from part of the Mural Painting facilities at ICCROM. More sophisticated equipment was made available through the generous collaboration of the Istituto Centrale per la Patologia del Libro and the Centro di Fotoriproduzione Legatoria e Restauro of the Italian State Archives.

TRAINING OUTSIDE ICCROM

Preventive Conservation, Oslo, Norway

15-25 January. At the invitation of Arne Bakken, President of the Norwegian Association of Conservators, G. de Guichen led a course at the Ethnographic Museum of Oslo. Fifteen conservators, librarians and scientists attended. At the end of each day, meetings were held with three participants particularly interested in the teaching methods. The Riksantikvaren organized a two-day visit to two wooden Roman churches in which polychrome statues are affected by the heating system, and a very interesting study of these complex cases was undertaken by two participants.

Following the course, the Conservators' Association organized two professional meetings to develop the climate and conservation theme.

Preventive Conservation, Istanbul, Turkey

26 April-3 May. At the invitation of the Turkish Ministry of Culture, G. de Guichen went to Istanbul where the Central Conservation and Restoration Laboratory organized a course, taking advantage of the travelling exhibition on climate and lighting control, which was presented at the same time. The course involved a series of visits to local museums, where each director received the participants, presented his museum — the collections and storage areas — and described the problems he faces. Frank discussions followed concerning possible solutions to the problems. Due to this, the course was particularly animated and practical. The visits included the Archaeological Museum, Dolmabahce Palace, the Museum of Fine Arts, the Islamic Museum, Topkapi Palace (textile section), and the private museum of Sadbek Hanim. The course was opened by a lecture on the theme "Preventive Climate Control in Museums".

International Course on the Technology of Stone Conservation, Venice, Italy

28 April-26 June. The seventh international course was attended by 25 participants from 20 countries. It was coordinated by Lorenzo Lazzarini (ITA) and P. Schwartzbaum. The assistant was Paolo Pagnin (ITA), a course participant in 1985.

The course is supported by Unesco, ICCROM, and the Italian Government and organized by ICCROM, in cooperation with the Superintendents of Artistic, Historic and Monumental Properties of the City of Venice.

The nine-week programme included lectures and practical work on the following topics: stone geology and petrography; stone quarrying and stone work; deterioration and biodeterioration; laboratory testing; principles of stone conservation (cleaning, consolidation, protection). A field trip to the quarries of Carrara was included, as well as visits to worksites in Bologna, Florence, Rome and Vicenza. Two new lecturers joined the international teaching staff this year: K. Blades (CAN), and G. Caneva, ICR, (ITA).

Although the course was hard hit by the depreciation of the US dollar and the fact that ICCROM had to reduce its financial contribution, ICCROM was able to obtain additional funding through the generosity of the World Monuments Fund (USA), and the Unesco World Heritage Fund, enabling the programme to be carried out successfully.

Refresher Courses in Denmark

8-12 June. Two short courses were held at the School of Conservation, Copenhagen, with ICCROM support. One on Structural Stabilization of Canvas Paintings attracted 15 participants, with 7 experienced conservators as lecturers and instructors. Participants had the opportunity to



Denmark: refresher course at the School of Conservation.

try out various types of equipment and methods, visit museum workshops, and discuss case studies. The second course, Conservation of Photographic Materials, devoted three days to the history and identification of photographic materials and processes, structure, chemistry and decomposition, as well as copying and storage of prints and negatives. The last two days focused on conservation and restoration processes. The participants represented seven European countries.

Summer Course: "PENN at the Castello di Spannocchia, Preservation Practice in Italy"

19 July-28 August. This programme was organized by Prof. David De Long, Chairman of the Graduate Program in Historic Preservation of the University of Pennsylvania, an ICCROM Associate Member. It was financed by the University, with scholarship assistance from the Kress Foundation.

The six-week course was conducted at the estate of Spannocchia (Siena), with J.-M. Teutonico as coordinator and A. Alva as principal lecturer. There were 14 participants from the United States and one from Colombia.

Lectures covered the following subjects: international preservation theory, urban conservation, documentation, survey, inspection, structural monitoring, introduction to laboratory, stone, brick, mortars, synthetic plastics, plasters, renders, colour, and urban and territorial conservation.

PENN at Spannocchia, summer programme.



Cuba: Postgraduate Architectural Conservation Programme.

Postgraduate Architectural Conservation Course, Havana, Cuba

25 October-6 November. J.-M. Teutonico carried out a teaching mission to Havana, Cuba, as part of the activities of the UNDP/Unesco Project CUB/86/017, which covered all expenses. Participants in the two-week course included 31 conservation professionals, 22 from Cuba and 9 from various other Latin American countries.

Ms. Teutonico delivered lectures on porous building materials, building stone, mortars and renders, and the conservation laboratory as a research and diagnostic tool. Other outside consultants included A. Alva, who lectured on problems of humidity, structural monitoring and earthen architecture, and C. Cesari (ITA), who addressed issues of urban conservation. General conservation theory, specific characteristics of Cuban architecture, ongoing conservation work and site visits were covered by Prof. Enrique Capablanca, Principal Course Lecturer, and various specialists of the Centro Nacional de Conservación, Restauración y Museología (CNCRM).

Consultations were also held with local authorities regarding the structure and content of the course, and a proposal was formulated for future collaboration in the realm of training. This proposal, directed toward specific areas of need, is under consideration by all parties involved in the UNDP/Unesco project.

Conservation of Painted Architectural Surfaces, Rome, Italy

At the request of the Associazione Professionale Restauratori d'Arte, a series of lectures was organized at the association's headquarters in Rome. The lectures were given in Italian by Roberto Marta and Rodolfo Luján, and a study worksite was also included in the course programme. There were 18 participants.

Climate and Lighting in Libraries and Archives, Trento, Italy

27-28 November. At the invitation of the Province of Trento, G. de Guichen and Roberto Boddi (ITA) were invited to lead a two-day course for about 40 librarians and archivists. At that time, a preventive campaign was launched, which will last a year and during which other more specialized courses will be organized.

COURSES

ICCROM PARTICIPATION IN OTHER COURSES

India

Series of Seminars Organized in Cooperation with the Indian National Trust for Art and Cultural Heritage (INTACH).

3-22 December. Sir Bernard Feilden and J. Jokilehto participated in a series of seminars organized in cooperation with INTACH. First, they attended the International Seminar on Conservation, organized by the Archaeological Survey of India and the State of Karnataka. The seminar was chaired by the former Director-General of ASI, Mr Nagaraja Rao, and attended by over 100 participants. Next came a full-day seminar at the Public Works Department of southern India. Some 25 engineers and architects from Bangalore, Mysore and Madras were in attendance at lectures and discussions.

They then attended the Regional Seminar for Asian countries on the World Heritage Convention, organized by ICOMOS from 14-17 December. The Minister of Culture and the Chief Secretary of the Ministry of Culture of India opened the seminar, which was attended by representatives from 18 Asian countries. Sir Bernard gave a presentation on ICCROM during the meeting.

Finally, they lectured to some 50 participants at the Workshop on Architectural Conservation (Education) organized by INTACH and the Heritage Trust of Baroda.

Italy

Rome: 11 February. G. de Guichen gave a lecture on governmental, nongovernmental and international organizations for students at the Istituto Centrale per la Patologia del Libro.

Turin: 14-31 May. At the invitation of the Polytechnic of Turin, J. Jokilehto lectured in the first Conservation Short Course organized at the Polytechnic. The course focused on the conservation of large structures.

Rome: 8 September. The M.A. Course in Architecture, Helsinki Polytechnic, visited ICCROM under the guidance of J. Jokilehto, and further collaboration was agreed on the organization of conservation seminars for the participants from developing countries.

United Kingdom

York: 9-13 November. At the invitation of the Institute for Advanced Architectural Studies, J. Jokilehto lectured on the work of international organizations and on conservation policies in different countries to the M.A. course. The course had 25 participants representing 12 countries.

York: 30 November-2 December. Sir Bernard Feilden was Course Chairman during this period and lectured on "Maintenance Strategy for Historic Buildings" at the IAAS.



India: the inauguration of the International Seminar on Conservation and Preservation of Cultural Heritage took place in the spectacular setting of the ancient capital Vijayanagar, Hampi.

United States

Philadelphia: 10 September-11 December. J.-M. Teutonico taught two semester-long courses as Adjunct Professor for the Graduate Program in Historic Preservation, the Graduate School of Fine Arts, University of Pennsylvania. The first course, *Conservation Science*, offered a basic introduction to the properties and analysis of traditional building materials. Sessions included both lectures and practical laboratory exercises.

The second course, *Documentation and Conservation of the Historic Landscape*, included analysis of landscape types, methods of landscape documentation from site analysis to remote sensing, historical and landscape archaeology, evaluation and philosophical approaches to the problem of landscape conservation, and the development of conservation/maintenance plans for selected historic landscapes.

New York: 17 October. At Columbia University, C. Erder gave a paper on "Trends in Conservation Training Worldwide", and took part in panel discussions on conservation training, sponsored by Preservation Alumni, Inc. Other participants in the panel included A. Tomaszewski, K. Anderson, W. Stivale, J. M. Fitch, Director of Preservation, Beyer, Blinder, Belle, Architects, and I. Spelsberg, Secretary General, ICOMOS Training Committee.

Yugoslavia

Split: 22-27 November. At the invitation of the Institute for Urban and Architectural Heritage, Split, University of Zagreb, J. Jokilehto lectured on the work of international organizations, the World Heritage Convention, urban conservation methodology and principles of restoration to the seventh M.A. Course in Conservation Studies. There were 33 participants from Yugoslavia; 150 participants have attended this two-year course so far.

COURSE ANNOUNCEMENTS

Teaching Skills and the Use of Teaching Materials

A sixth seminar, led by Robert Ferguson of the Institute of Education, University of London, will be held at ICCROM from 6-10 June 1988. It is open to 12 teachers and future teachers of conservation/restoration training programmes. Through lectures and practical work, the seminar will focus on public speaking, design and production

COURSES

of visual aids, basic task analysis in preparation of training programmes, and the distinction between lectures and seminars. There are no course fees, but participants must cover their own travel and accommodation expenses. Contact E. Fiorini at ICCROM.

ICCROM Summer Workshop for Mural Paintings Restorers — 1989

The ICCROM Mural Paintings section will offer a summer workshop for restorers from 13 June to 11 August 1989. Open to a maximum of 15 participants with at least 4 years' experience in conservation, the course will offer practical training at Santa Maria dell'Anima, and a certificate of attendance will be given. The course fee is \$300; participants must pay for their own insurance, travel and accommodation. Applications are due by 12 April 1989. For further information, contact Rodolfo Luján, ICCROM.

Refresher Courses at the School of Conservation, Royal Danish Academy of Fine Arts

Two courses are again being offered from 26 June-1 July 1988 in Denmark: A) Structural Stabilization of Canvas Painting: Low-pressure Techniques; B) Conservation of Photographic Material. The maximum number of places is 15 for each course, and the fee will be 2,000 Danish crowns. For further details write to: A) Steen Bjarnhof or B) Mogens S. Koch, Royal Danish Academy of Fine Arts, School of Conservation, Esplanaden 34, DK-1263 Copenhagen K, Denmark.

Summer School. Institute of Archaeology, University of London

Organized with ICCROM support, the programme for July 1988 offers a selection of individual short courses (normally five days), and will cover a wide variety of topics in conservation as well as archaeology and museum studies. For further information, contact James Black, Coordinator, Summer Schools, Institute of Archaeology, 31-34 Gordon Square, London WC1H 0PY.

Institute of Advanced Architectural Studies, University of York

Offered in collaboration with the British Council and ICCROM, the 18th annual summer school on the Conservation of Historic Structures will take place on 19-29 September 1988. The programme has been planned especially for professionals from countries outside the U.K., and it aims to present an overall view of conservation in practice. The fee, including full accommodation and meals and all expenses in connection with the visits in the pro-

gramme, is 485 pounds sterling.

The IAAS has also recently announced two new options connected with the MA Course in Conservation Studies. The full-time one-year programme will continue to be offered, but the course can now also be taken in three, one-term blocks over an agreed number of years. This may appeal particularly to those who have not been able to take a complete year's absence from work. The second option is an opportunity to specialize in the conservation of historic parks and gardens. This will be partly a joint course with the architectural conservation participants and partly a new series of lectures, seminars, field trips and exercises. This option is also available as a full-time course or three-block series. Fees for the full-time course are £ 1,730 (UK and EEC candidates) £ 3,690 (overseas candidates). A number of EEC Scholarships will be available for both options. For further information on all courses, apply to the Secretary, Institute of Advanced Architectural Studies, King's Manor, York YO1 2EP, U.K. (Tel. 0904-24919).

Postgraduate Architectural Conservation Course, Havana, Cuba

7-18 November, 1988. The course this year will focus on historic centres in Latin America, humidity problems in historic structures, and treatment of architectural surfaces. Invited lecturers from ICCROM will be I. Massari, L. and P. Mora, and J.-M. Teutonico. For further information, please contact Dr Angel Guerra, Centro Nacional de Conservación, Convento de Santa Clara, Calle Cuba 610 esq. Sol y Luz, Havana 1, Cuba.

Postgraduate Course on Earth Construction — CEAA-Terre

This two-year course on earthen construction will run from January 1989-September 1989, and October 1989 to September 1990. It is being organized by the School of Architecture of Grenoble "EAG" in close cooperation with CRATerre (an ICCROM Associate Member) and the University of Grenoble "USTMG". The certificate is accessible to architects or to university graduates.

The course programme will include seminars with international experts, researchers and practitioners from different fields. The following subjects will be treated: geophysics, production and construction technology, design with climate, archaeology, history, preservation, renovation, human settlements and socio-cultural aspects, anti-seismic design, statics, local building materials in general.

Knowledge of French is essential; knowledge of English is required. Fees: 1,350 FF per year. Application deadline, 1 July 1988. For further information, contact CEAA-Terre, Ecole d'Architecture de Grenoble, 10 Galerie des Baladins, F-38100 Grenoble, France.

LIBRARY AND DOCUMENTATION

Acquisitions

During the year, the library acquired some 2,000 books and offprints through purchase, gift or exchange. Some 650 periodicals were received by subscription, gift or exchange. There are now 37,440 books, offprints and periodicals in the library's possession.

Due to the transfer of the ICCROM data base from Rome to Ottawa at the end of 1986, publication of the *List of Acquisitions* and the *Subject Index* from the new database was postponed to a later date. In the meantime, these acquisitions are accessible to people with computer links to the Conservation Information Network (CIN).

Information and Documentation Service

In 1987, the library corresponded with numerous institutions and individual researchers, supplying bibliographies, photocopies of articles or reports, and donating books. Part of the relative outlay was covered by the technical assistance budget.

The library continued to supply photocopies of texts to ICCROM course participants, and to reproduce material requested either by the readers in the library or by correspondents requiring documents mentioned in our *List of Acquisitions* or in our bibliographies.

Computerization of the Catalogue

Personnel devoted their time solely to abstracting and registering recent acquisitions, so computer registration of the backlog was slightly postponed. It should be noted, however, that there remain only 1,500 to 2,000 abstracts to complete the original 20,000 abstracts estimated in 1977. This will be done little by little, when time and money permit.

International Documentation System

This year the Conservation Information Network, a new data bank created under the auspices of the Getty Conservation Institute, was officially launched. All the data of ICCROM henceforth will be sent to Ottawa; at the end of 1987, the total number of ICCROM references supplied was 35,000. Only 25,000 are currently available on-line, due to some difficulties with reading our computer tapes and diskettes, but everything should be inserted in the very near future. Three meetings were held in Rome, Paris and Ottawa, respectively, at which the representatives of the member organizations of CIN (GCI, Canadian Heritage Information Network, ICOMOS, Conservation Analytical Laboratory of the Smithsonian Institution (CAL), Canadian Conservation Institute (CCI) and ICCROM) participated in order to complete standardization of registration methods and bibliographic content. A new registration system, REVELATION, is being tried out and should replace the software in use at ICCROM since 1977.

The new operating system made necessary by the re-

moval of the data bank from Rome to Ottawa was set up without any major problems except that of erratic telecommunications and above all the delay in registering ICCROM's references in Ottawa, which has prevented us from updating our manual card index and printing our annual *List of Acquisitions* since 1986.

These temporary inconveniences should not diminish the advantage of having access to our data bank, as well as those of other member institutions, at no cost. The problem of duplication, the sharing of publications to be abstracted and the standardization of the lists of key words should be discussed in 1988.

Another initiative in the field of international documentation was recently taken by the Council of Europe through the committee in charge of the integrated conservation of historic heritage. A meeting was organized in Strasbourg on 3-4 December 1987 on cooperation between national and international documentation centres concerning heritage matters. Besides ICOMOS and ICCROM, representatives of the following countries also participated: Austria, Denmark, Federal Republic of Germany, France, Netherlands, Norway, Portugal, Sweden and United Kingdom.

RECENT ACQUISITIONS

Some interesting new titles acquired by the library in 1987 are given below.

Archaeology

GRIMAL, Nicolas-Christophe, Ed. *Prospection et sauvegarde des antiquités de l'Egypte. Proceedings of the round table organized for the centenary of the French Institute of Oriental Archaeology, 8-12 January 1981*. Cairo: Institut français d'archéologie orientale, 1981. (Bibliothèque d'étude, T.LXXXVIII, 1981).

Publication of 50 papers, in French or English, on the problems of study, survey and conservation of the Pharaonic, Greco-Roman, Coptic and Islamic heritage of Egypt. Excavations, clearing the ruins, stone conservation, and protection of sites and buildings threatened by negligence and urban development are studied in detail.

Architecture - Buildings

La Protección de Monumentos Históricos en Areas Sísmicas. Documentos y Conclusiones: Seminario Internacional, La Antigua, Guatemala 4 al 11 de Noviembre 1979. Lima: Unesco - UNDP, n.d., 165 p.

Final publication of a selection of papers presented at the 1979 conference on protection of monuments in seismic areas. They focus principally on assessment of damage, restoration, and means of prevention. A bibliography on the topic is appended.

LIBRARY AND DOCUMENTATION

Structural Renovation of Traditional Buildings. London: Construction Industry Research and Information Association, 1986, 98 p. (Report 111).

Manual on the structural aspects of restoration of traditional buildings (eighteenth to early twentieth-century). The following points are studied in detail: historical aspects of construction, structure and repair of masonry, timber and wooden elements, cast and wrought iron and steel, foundations, facades. Numerous figures. Bibliography and glossary.

TASSIOS, T.P. - MAMILLAN, Marc. *Valutazione Strutturale dei Monumenti Antichi*. Rome: Ed. Kappa, 1985, 99 p.

Work in Italian and English on various techniques of analysis of ancient structures, including nondestructive techniques for assessing the properties of materials and recording the general behaviour of buildings, by means of geotechnical surveys and terrestrial photogrammetry. Numerous illustrations and drawings.

Atmospheric Pollution

The Effects of Air Pollution on Historic Buildings and Monuments. Padua, 30 September-2 October 1985. Brussels: Commission of the European Communities - Directorate General for Science, Research and Development/Environment Research Programme, 1986, 175 p.

Publication of the principal reports presented by researchers of Ireland, Italy, and the United Kingdom at the meeting organized by the Commission of the European Communities in collaboration with the Italian National Research Council. The conclusions, recommendations and suggestions for future research are included. Comprehensive bibliography.

Biodeterioration

ALLSOPP, Dennis - SEAL, Kenneth J. *Introduction to Biodeterioration*. London: Edward Arnold, 1986, 136 p.

Basic text on the biodeterioration phenomena that affect natural materials, such as wood, stone and leather, materials that have been processed, such as plastics, glass, metal and paints, and structures. Different methods of control are described. Numerous bibliographic references.

Conservation - General

Centraal Laboratorium Themadage N1 - 11. Amsterdam: Centraal Laboratorium voor onderzoek van voorwerpen van Kunst en Wetenschap, 1981-1987.

This series of booklets, published by the Central Research Laboratory of Amsterdam, contains papers presented during workshops on particular topics. The eleven workshops organized to date have principally focused on technical

conservation problems and the storage of collections of technical objects, such as scientific instruments, globes, weapons, etc.

Conservación y Restauración. El Patrimonio Cultural de Castilla y León. Madrid: Junta de Castilla y León - Consejería de Educación y Cultura, 1987, 254 p.

Catalogue of an exhibition presenting the activities of conservation and restoration of the Consejería de Educación y Cultura of Castile and León from 1984 to 1987. The work principally involved the following fields: studies and restoration of stone structures and decoration; interventions on archaeological sites; treatment of mural paintings. Case studies of building restorations are given as examples. Numerous illustrations.

Restauri a Bologna e Ferrara. Conservation Works in Bologna and Ferrara. Bologna: Fondazione Internazionale Cesare Gnudi, 1986, 105 p.

Bilingual report in Italian and English on conservation works carried out in Bologna and Ferrara in collaboration with the Cesare Gnudi Foundation. Among others, these works involved historic buildings with decorative sandstone elements, statuary in other stones or terra-cotta, mural paintings, stained glass and easel paintings. Technical details are provided for each intervention. Numerous illustrations.

Gardens

CATALANO, Mario - PANZINI, Franco. *Giardini Storici. Teoria e Tecniche di Conservazione e Restauro*. Rome: Officina Edizioni, 1985, 143 p.

Work studying in detail the methodology of the study and the conservation of historic gardens: history, morphological analysis, analysis of degradation phenomena, intervention techniques - including cutting, reinforcement of existing plants and the choice of new species. Examples of conservation of gardens in Europe are described. In appendix, historical table of plants and species, and bibliography.

Geological Materials

Guidelines for the Curation of Geological Materials. Ed. by C.H.C. Brunton, T.P. Besterman and J.A. Cooper. London: The Geological Society, 1985, 201 p. (Miscellaneous Paper N° 17).

Manual giving detailed instructions for the preservation of collections of geological materials. It is divided into five parts: acquisition; documentation; preservation; occupational hazards; uses of collections - information retrieval. Comprehensive bibliography and appendices giving lists of adhesives, equipment and suppliers in the United Kingdom.

Ivory

Ivory. A History and Collector's Guide. London: Thames and Hudson, 1987, 352 p.

Reference work for the study of ivory through the centuries, from the Paleolithic era to the twentieth century. The different types of ivory used, the objects and sculptures produced, the sale of ivory, and its care and repair are studied and fully illustrated. Glossary and bibliography in appendix.

Library

BANKS, Joyce M. *Guidelines for Preventive Conservation. Directives régissant la conservation préventive.* Rev. ed. - Ed. r.v. Ottawa: National Library of Canada - Bibliothèque nationale du Canada, 1987, 45 p.

Manual in English and French, intended for library personnel, which provides guidelines for programming preventive conservation. Topics include environment, storage, handling, microfilming, exhibitions, binding and disaster procedures. A model of preservation policy is annexed. Bibliography.

Metal

STAMBOLOV, Todor. *The Corrosion and Conservation of Metallic Antiquities and Works of Art.* Amsterdam: Central Research Laboratory for Objects of Art and Science, 1985, 236 p.

New, revised and corrected edition of this classic work, first published in 1968. Following an introduction on the general principles of corrosion and methods of preservation, the specific problems of metals such as copper, iron, lead, tin, silver and gold are studied in detail. Full bibliography.

Mortars

TUFANI, Angela. *Le Malte nel Restauro. Studi, Ricerche e Operatività.* Todi: Edart, 1987, 112 p. (Arte e Restauro 6). Practical manual for the understanding and production of mortars used in restoration of buildings. Various types of binders and other materials used in mortars are studied in detail. Numerous tables, bibliography and legislative texts on restoration standards in Italy.

Mural Paintings

The Sistine Chapel - Michelangelo Rediscovered. London: Muller, Blond & White, 1986, 271 p.

Collective work, richly illustrated, on the history, composition and technique of the Sistine Chapel paintings. The last chapter, by Fabrizio Mancinelli and Gianluigi Colalucci, focuses more particularly on the restoration of the lunettes, the care with which the cleaning was done, and the rediscovery of a palette of colours that had disappeared beneath the dust and soot.

Natural Environment

Comune di Venezia. *The Physical Safeguarding of the Lagoon. La sauvegarde physique de la lagune.* Venice: Marsilio Editori, 1984, 158 p.

Bilingual publication, French and English, issued by the city of Venice 10 years after the approval of the "Special Law for Venice". It describes the main points of the feasibility study and the preliminary project for defence of the lagoon against flooding, the opinions expressed on these studies, as well as a summary of the plan for preliminary action, drawn up by the Magistrate of the Waters of Venice and partly implemented.

Pavements

WIHR, Rolf. *Fussböden. Stein, Mosaik, Keramik, Estrich.* Munich: Callwey, 1985, 283 p.

Manual on the history, manufacture and conservation of pavements in stone, mosaic, ceramic and clay. Each material and its maintenance are studied in detail with numerous examples and illustrations. In appendix, technical advice for removing stone pavements from the inside of a building.

Photography

La Fotografia. 1. Tecniche di Conservazione e Problemi di Restauro, a cura di Luisa Masetti Bitelli e Riccardo Vlahov. Bologna, Edizioni Analisi, 1987, 239 p. Istituto per i Beni Artistici Culturali e Naturali, Emilia Romagna - Biblioteche Archivi N° 7).

Collective work on the conservation and restoration of photographs. It is divided into six parts: evolution of photographic techniques, including history and technology of colour processing; agents of deterioration of photographic images and methods of protection; problems of conservation and restoration; experimental research; microreproduction; international standards for the conservation of photographs. Illustrations and bibliographies.

Prints and Photographs

Les documents graphiques et photographiques. Analyse et conservation. Travaux du Centre de recherche sur la conservation des documents graphiques 1984-1985. Paris: Archives nationales, 1986, 243 p.

Publication of different conservation and restoration works done by the Centre. The main topics are repair of deteriorated paper, degradation of polyamides used for lamination, behaviour of leather and parchment in an urban environment, deterioration of the oil used to treat leather, cleaning of parchment, analysis of orange pigments and conservation of negatives on glass plates. Bibliographic references.

LIBRARY AND DOCUMENTATION

Rock Art

VOUVE, J. - BRUNET, J. - VIDAL, P. - MARSAL, J. *Lascaux en Périgord Noir. Environnement, art pariétal et conservation*. Périgueux: Pierre Fanlac Ed., 1982, 87 p.

The book, in German, English, Spanish and French, is divided into two parts. The first is on the conditions that fostered the birth of rock art and especially the Lascaux cave paintings. The second is on the problems of conservation: the climatic parameters, the environment, the geology and hydrology of the hill and the cave have made it possible to establish a conservation policy which includes air conditioning and protection of the atmospheric and subterranean ambience.

Scientific Methodologies Applied to Works of Art

Scientific Methodologies Applied to Works of Art. Proceedings of the Symposium, Florence 2-5 May 1984. Paolo L. Parrini Ed. Milan: Montedison Progetto Cultura, 1986, 247 p.

The proceedings of the conference, which include 47 papers, are divided into five sections: study of techniques and materials; identification of deterioration processes;

research on methods and materials to use in restoration; dating; authenticity. Bibliographies, notes, illustrations and diagrams.

Stone

Il Restauro dei Portali della Basilica di San Nicola di Bari. Rome: Fratelli Palombi Ed., 1986, 72 p.

Report on the restoration of the stone portals and decorative elements of the Basilica of Saint Nicholas at Bari. The works, done under the direction of the Soprintendenza ai Beni Architettonici di Puglia in collaboration with the Istituto Centrale del Restauro, included nondestructive analysis of the state of conservation of the marble and limestone, cleaning and consolidation. For the cleaning, a new procedure using water treated with ion-exchange resins, HCO_3 , was employed with success.

Wood

Preservation of Timber in the Tropics. Ed. W.P.K. Findlay. Dordrecht: Martinus Nijhoff, 1985, 273 p.

Collective work presenting 12 papers on different aspects and their application, protection of logs and sawn timber are studied in detail. In appendix: precautions to follow during use of chemical products.

PUBLICATIONS

LATEST ICCROM PUBLICATIONS

Conservation of Metal Statuary and Architectural Decoration in Open-air Exposure: Symposium, Paris, 6-8 October 1986. ISBN 92-9077-079-1.

The proceedings of this symposium offer an overview of work by several experts in a rapidly-evolving field. The papers are in English or French, and there are numerous illustrations.

1987, 304 pages. \$15.00.

International Index on Training in Conservation of Cultural Property. 4th edition. ISBN 92-9077-072-4.

Prepared at ICCROM and edited and printed in the USA by the Getty Conservation Institute, the latest edition of the Index has a new, attractive three-column format, which saves on space. The book can be purchased at either institution.

1987, 105 pages. \$10.00.

Between Two Earthquakes, by Sir Bernard Feilden.

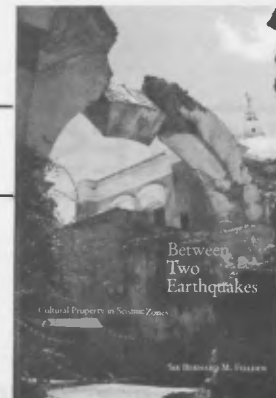
Another joint publication project with the GCI, much of the material for this book evolved from ICCROM activities in the field. It discusses issues related to the management and protection of historic structures, sites, and monuments in seismic zones, and also offers practical suggestions on fire protection, recording techniques, maintenance and structural interventions. The book is now available from the GCI, 4503 Glencoe Avenue, Marina del Rey, CA 90292, USA, and at ICCROM.

1987, 108 pages. \$8.00

International Index of Conservation Research

This is the first edition of this directory, which will be regularly updated, expanded and, we hope, improved. Some 600 entries were collected at ICCROM, then computerized at the Conservation Analytical Laboratory, Smithsonian Institution. After some final touches on both sides of the Atlantic, the material was ready for publication in early 1988. Improvements to the data handling and input for the next edition are already under study.

1988, 160 pages. \$6.00.



ICCROM PUBLICATIONS IN PROGRESS

A Laboratory Manual for Architectural Conservators, by Jeanne-Marie Teutonico.

This compendium of basic laboratory analyses of building materials, developed by the author as part of the curriculum of the Architectural Conservation Course, is scheduled for publication in spring of 1988 as part of ICCROM's technical notes series.

Porous Building Materials, by Giorgio Torraca. Third edition.

As stocks of this ICCROM best seller were dwindling rapidly, the entire text was transferred to the word processor in anticipation of the need for a new edition. This process also provided an opportunity to make minor editorial revisions. It will go to press early in 1988.

Proceedings of the 5th International Meeting of Experts on the Conservation of Earthen Architecture

The publication of the proceedings of this meeting, held on 22-23 October 1987 at ICCROM, is being coordinated by ICCROM and Le Centre International de Recherche et d'Application pour la Construction en Terre (CRATerre). It will be printed in France with a contribution from the Architecture School of Grenoble, and the Direction of Architecture and Urbanism.

OTHER PUBLICATIONS

The proceedings of the 4th meeting of the International Committee for Mosaics Conservation, held from 14-20 September 1986, in Soria, Spain, have now been published by the Servicio de Investigaciones Arqueológicas, Diputación Provincial de Soria, edited by Carlos de la Casa. This 421-page publication is now available from ICCROM's Publication Sales Department.

The Tunisian National Institute for Art and Archaeology, in collaboration with ICCROM, has published an Arabic translation of *Mosaics No. 2, Safeguard*. It was previously published in English and French in Rome.

The Regional Centre for Conservation of Cultural Property in Arab States, Baghdad, has also been translating various ICCROM works into Arabic, starting with *Humidity in Monuments*, by G. Massari.

A Spanish translation of Gaël de Guichen's book on measurement of climate in museums, *El Clima en los Museos - Medición - Fichas Técnicas*, has been published by the Proyecto Regional de Patrimonio Cultural y Desarrollo PNUD/Unesco, with a financial contribution by ICCROM. It can be obtained from the UNDP office, Casilla 4480, Lima, Peru.



SALES

ICCROM PUBLICATIONS FOR SALE

E: English – D: Deutsch – F: Français – I: Italiano
– Sp: Español – A: Arabic

□ = new publications / □ = nouveau

Architectural Conservation and Environmental Education.
Conclusions of the meeting. ICCROM. February 1975.
Conservation architecturale et éducation à l'environnement.
Conclusions de la conférence. ICCROM.
Février 1975. 24 pp. (1979) ISBN 92-9077-019-8

(E/F) \$ 4.00

Catalogues of technical exhibitions; catalogues d'expositions techniques; cataloghi, mostre tecniche:

n. 2: Theft – Vol – Furto. 59 pp. (1977) ISBN 92-9077-013-9

(E/F/I) \$ 3.50

□ Conservation of Metal Statuary and Architectural Decoration in Open Air Exposure.

Conservation des oeuvres d'art et décorations en métal exposées en plein air. Symposium, Paris, 6-8.X.1986. 302 pp. (1987) ISBN 92-9077-079-1

(E/F) \$ 15.00

Conservation on Archaeological Excavations. Ed. N. Stanley Price. 158 pp. (1984) ISBN 92-9077-050-3

(E) \$ 6.50

De ANGELIS d'OSSAT, G. Guide to the Methodical Study of Monuments and Causes of Their Deterioration.

Guida allo studio metodico dei monumenti e delle loro cause di deterioramento. 2nd ed. 48 pp. (1982) ISBN 92-9077-031-7

(E/I) \$ 4.50

□ FEILDEN, Sir Bernard M. Between Two Earthquakes: Cultural Property in Seismic Zones. 108 pp. (1987)

(E) \$ 8.00

FORAMITTI, H. Mesures de sécurité et d'urgence pour la protection des biens culturels. 44 pp. (1972)

ISBN 92-9077-002-3

(F) \$ 4.00

FORAMITTI, H. La Photogrammétrie au service des conservateurs. 48 pp. (1973) ISBN 92-9077-004-X

(F) \$ 4.50

GALLO, F. Biological Factors in Deterioration of Paper. Facteurs biologiques de détérioration du papier. 165 pp. (1985) ISBN 92-9077-062-7

(E/F) \$ 7.00

GAZZOLA, P. The Past in the Future. 2nd edition 138 pp. (1975) ISBN 92-9077-008-2

(E) \$ 5.00

□ GUICHEN, G. de. Climat dans le musée: Mesure. 3ème édition en préparation.

Climate in Museums: Measurement. 3rd ed. in press. 80 pp. (1988) ISBN 92-9077-082-1

(F/E) \$ -

ICCROM – Library. List of Acquisitions 1977-78. Bibliothèque. Liste des acquisitions 1977-78.

319 pp. (1979) ISBN 92-9077-016-3

\$ 11.00

List of Acquisitions / Liste des acquisitions 1979-80.

528 pp. (1981) ISBN 92-9077-025-2

\$ 19.00

List of Acquisitions / Liste des acquisitions 1981. 378 pp. (1983) ISBN 92-9077-037-6

\$ 13.50

List of Acquisitions / Liste des acquisitions 1982. 455 pp. (1983) ISBN 92-9077-038-4

\$ 13.50

List of Acquisitions / Liste des acquisitions 1983. 422 pp. (1984) ISBN 92-9077-051-1

\$ 18.00

List of Acquisitions / Liste des acquisitions 1984. 457 pp. (1985) ISBN 92-9077-059-7

\$ 23.00

List of Acquisitions / Liste des acquisitions 1985. 521 pp. (1986) ISBN 92-9077-073-2

\$ 35.00

(E/F) Subject Index 1977-78. 329 pp. (1979) (Photocopies) ISBN 92-9077-017-1

\$ 11.00

Subject Index 1979-80. 494 pp. (1981) ISBN 92-9077-026-X

\$ 19.00

Subject Index 1981. 495 pp. (1983) ISBN 92-9077-039-2

\$ 13.50

Subject Index 1982. 537 pp. (1983) ISBN 92-9077-040-6

\$ 13.50

Subject Index 1983. 332 pp. (1984) ISBN 92-9077-052-X

\$ 18.00

Subject Index 1984. 591 pp. (1985) ISBN 92-9077-060-X

\$ 23.00

Subject Index 1985. 602 pp. (1986) ISBN 92-9077-074-X

\$ 35.00

(E) ICCROM – Bibliothèque. Table des Matières 1977-78. 326 pp. (1979) ISBN 92-9077-018-X

\$ 11.00

Table des Matières 1979-80. 490 pp. (1981) ISBN 92-9077-027-9

\$ 19.00

Table des Matières 1981. 493 pp. (1983) ISBN 92-9077-041-4

\$ 13.50

Table des Matières 1982. 535 pp. (1983) ISBN 92-9077-042-2

\$ 13.50

Table des Matières 1983. 328 pp. (1984) ISBN 92-9077-053-8

\$ 18.00

Table des Matières 1984. 589 pp. (1985) ISBN 92-9077-061-9

\$ 23.00

Table des Matières 1985. 600 pp. (1986) ISBN 92-9077-075-9

\$ 35.00

(F) □ International Index of Conservation Research. Répertoire international de la recherche en conservation. 160 pp. (1988) ISBN 92-9077-080-5

(E/F) \$ 6.00

□ International Index on Training in the Conservation of Cultural Property. 4th Edition. 96 pp. (1987) ISBN 92-9077-072-4

(E/F) \$ 10.00

International Meeting of Coordinators of Training in Architectural Conservation.

Réunion internationale des coordinateurs pour la formation en conservation architecturale. 238 pp. (1983)

ISBN 92-9077-043-X

(E/F) \$ 7.00

Ironworks and Iron Monuments: Study, Conservation and Adaptive Use. Forges et monuments en fer: étude, conservation et réutilisation. 440 pp. (1985) ISBN 92-9077-055-4	
(E/F)	\$ 11.00
MARASOVIC, T. Methodological Proceedings for the Protection and Revitalization of Historic Sites (Experiences of Split). 56 pp. (1975) ISBN 92-9077-007-4	
(E)	\$ 5.00
MASSCHELEIN-KLEINER, L. Ancient Binding Media, Varnishes and Adhesives. 128 pp. (1985) ISBN 92-9077-058-9	
(E)	\$ 4.50
Mortars, Cements and Grouts Used in the Conservation of Historic Buildings. Symposium 3-6 November, 1981, Rome. Mortiers, ciments et coulis utilisés dans la conservation des bâtiments historiques. Symposium 3-6 novembre 1981, Rome. 414 pp. (1982). ISBN 92-9077-030-9	
(E/F)	\$ 13.00
Mosaics n. 2: Safeguard. Carthage 1978, Périgueux 1980. 63 pp. (1983) ISBN 92-9077-044-9	
(E)	\$ 9.00
Mosaics n. 3/Mosaïque n. 3: Conservation in situ. Aquileia 1983. 400 pp. (1985) ISBN 92-9077-054-6	
(E/F/I)	\$ 11.00
Mosaïque n. 2: Sauvegarde. Carthage 1979, Périgueux 1980. 60 pp. (1981) ISBN 92-9077-028-7	
(F)	\$ 9.00
MÜHLETHALER, B. — BARKMAN, L. — NOACK, D. Conservation of Waterlogged Wood and Wet Leather. 71 pp. (1973) ISBN 92-9077-003-1	
(E)	\$ 5.00
Participant Directory/Annuaire des participants. 94 pp. (1983) ISBN 92-9077-045-7	
(E/F)	\$ 4.00
Preventive Measures During Excavation and Site Protection. Mesures préventives en cours de fouilles et protection du site. Ghent 6-8 November, 1985. 324 pp. (1986) ISBN 92-9077-070-8	
(E/F)	\$ 15.00
STAMBOLOV, T. — VAN ASPEREN de BOER, J.R.J. The Deterioration and Conservation of Porous Building Materials in Monuments. 2nd edition. 86 pp. (1976) ISBN 92-9077-011-2	
(E)	\$ 5.00
□ TEUTONICO, Jeanne-Marie. A Laboratory Manual for Architectural Conservation, 176 pp. (1988) ISBN 92-9077-083-X	
(E)	\$ 7.00
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TORRACA, G. Matériaux de construction poreux: science des matériaux pour la conservation architecturale. 160 pp. (1986) ISBN 92-9077-071-6	
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OTHER PUBLICATIONS FOR SALE

Appropriate Technologies in the Conservation of Cultural Property. Paris: Unesco. 136 pp. (1981)	
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(E)	\$ 8.00
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(E/F)	\$ 2.00
Deterioration & Preservation of Stones. Proceedings of the 3rd International Congress. Venice, 24-27 October 1979. La détérioration et la préservation de la pierre. Actes du 3ème congrès international. Venise, 24-27 octobre 1979. Venice: Fondazione "Giorgio Cini". 715 pp.	
(E/F/I)	\$ 25.00
ERDER, C. Our Architectural Heritage: From Consciousness to Conservation. Paris: Unesco. 236 pp. (1986)	
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(E/F)	\$ 50.00
ICOM Committee for Conservation. 7th Triennial Meeting, Copenhagen, 10-14 September 1984. Preprints. 2 vols. Paris: ICOM (1984)	
(E/F)	\$ 70.00
□ ICOM Committee for Conservation. 8th Triennial Meeting, Sydney 6-11 September 1987. Preprints. 3 vols. U.S.A.: Getty Conservation Institute (1987) ISBN 0-89236-094-1	
(E/F)	\$ 100.00
Jacopo della Quercia e la Facciata di San Petronio a Bologna. Contributi allo studio della decorazione. Notizie sul restauro — Reports on the Conservation Treatment. Part I in Italian — Part II in both Italian and English. Bologna: Centro Cesare Gnudi per la Conservazione delle Sculture all'Aperto. 306 pp. (1981)	
(E/I)	\$ 10.00

SALES

La conservazione sullo scavo archeologico. Rome: Centro di Conservazione Archeologica. 166 pp. (1986)	
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(I/E)	\$ 17.00
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MORA, L. - MORA, P. - PHILIPPOT, P. The Conservation of Wall Paintings. London: Butterworths. (1984)	
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(A)	\$ 10.00
□ Mosaics N. 4: Conservation "in Situ" '86. Soria: Servicio de investigaciones Arqueológicas, Diputación Provincial de Soria. 440 pp. (1987)	
(E/F)	\$ 11.00
Synthetic Materials Used in the Conservation of Cultural Property (photocopies).	
- Matériaux synthétiques utilisés en conservation (photocopies).	
- Materiales sintéticos empleados en la conservación de bienes culturales (fotocopias). 30 pp. (1968)	
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The Conservation of Stone II. Preprints of the contributions to the International Symposium, Bologna, 27-30 October 1981. 2 vols. Bologna: Centro per la Conservazione delle Sculture all'Aperto. 844 pp. (1981)	
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THOMSON, G. The Museum Environment. 2nd Ed. London: Butterworths. 270 pp. (1986)	
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TORRACA, G. - MASSCHELEIN-KLEINER, L. Lösungsmittel in der Restaurierung. Vienna: Verlag der Apfel. 150 pp. (1984)	
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CONFERENCE REPORT



FIFTH INTERNATIONAL MEETING OF EXPERTS ON THE CONSERVATION OF EARTHEN ARCHITECTURE: 22-23 October, Rome.

A meeting was held at ICCROM to discuss current activities in the field of preservation of mud brick, promote collaboration between various institutions on related research projects and recommend future lines of action in the technology of preservation of earthen architecture. Twenty-one experts attended the meeting, which was by invitation only. A proposal was made to change the name of the committee to the ICOMOS International Committee for the Study and Conservation of Earthen Architecture, and the full recommendations are given below.

The event was organized by ICCROM, the Centre International de Recherche et d'Application pour la Construction en Terre (CRATerre) and the Ecole d'Architecture de Grenoble, Direction de l'Architecture et de l'Urbanisme, in collaboration with the ICOMOS International Committee for the Conservation of Mud Brick, of which Cevat Erder is Chairman.

The publication of the proceedings of the meeting is being coordinated by ICCROM and CRATerre. It will be printed in France with a subsidy from the Architecture School of Grenoble and the Direction of Architecture and Urbanism. The highlights of the recommendations are given below.

RECOMMENDATIONS

1. That the name of the International Mud Brick Committee be changed to "International Committee for the Study and Conservation of Earthen Architecture".
2. That the Committee act as a clearinghouse for important international development (creating a newsletter and bibliography).
3. That a specific training programme be created on the study and conservation of earthen architecture. This 6/8-week training course should be held every other year in Grenoble in the facilities offered by CRATerre/EAG/USTMG.
4. That links be established between the Committee and industrial laboratories.
5. That the members of the Committee initiate and support national subcommittees. One of the tasks of these national subcommittees should be to develop strategies and recommendations for their governments.
6. That more attention be given to the monitoring of physico-chemical processes of test sites.
7. That a comprehensive inventory of significant earthen architecture in the world be conducted, to include archaeological sites, ruins and existing buildings.
8. That a multidisciplinary state-of-the-art report be drafted for general circulation.
9. That a 6th International Meeting of Experts be organized in the near future.

(A proposal was made by the New Mexico State Monuments and the Getty Conservation Institute to host this meeting in 1990 in Las Cruces, New Mexico, USA).

(The Italian team made a proposal to draft the state-of-the-art report for Italy, and the Chief Technical Advisor of the UNDP/Unesco Regional Cultural Heritage Project in Latin America made a proposal to finance a mission in order to evaluate the works performed on three to four significant sites.)

RESEARCH AND DEVELOPMENT



The cloister of Santa Chiara where a computerized survey of the tiles is being made.

Grouts and Mortars for Conservation - Documentation

The research on computerized documentation for the conservation of architectural surfaces continued with the pilot project on the glazed tiles of the Santa Chiara cloister in Naples. Two young persons without computer experience were trained to register the information on an Apple Macintosh computer, with a commercial graphic database programme adapted by Jef Malliet (ICCROM). The user-friendliness of the system was checked for future improvements.

About 10% of the total amount of information has been recorded for the Santa Chiara cloister. Another experiment was done on the model of a tufa block masonry wall, the Servian Wall at Piazza Albania in Rome, enabling us further to explore the possibilities and limitations of the programme. This research will be continued with more powerful software capable of solving the problems that have arisen.

Grouts and Mortars for Conservation - Application

Jef Malliet and Elisabetta Giorgi (ITA) continued research on injection grouts for conservation. Especially lightweight mortars were tested, made with light aggregates or with gas-producing admixtures.

Malliet and Giorgi collaborated in the preparation and execution of an experimental worksite in Rome at the Forum of Nero. The work involved the restoration of a heterogeneous masonry wall, in peperino stone, tufa and brick masonry. The peperino was cracked and its surface was heavily deteriorated. The tufa blocks were very soft and badly weathered. The masonry joints were often cracked or washed out. During the conservation work, the cracks and openings were sealed, and loose pieces at the surface were strengthened by means of specially-composed mortars adapted to the original materials. The deeper voids and cracks were injected with a grouting mortar developed during previous research. The weak zones of the stones were treated with a stone consolidant. Where

necessary, the joints were cleaned and repointed with a new restoration mortar. This was the first restoration of this type, and was made possible by the experience gained from past ICCROM research on mortars and grouts.

Façade Rendering and Colouration in Historic Town Centres: Sermoneta

Research was started on this topic, which is characterized by a high degree of confusion. Although very much discussed during the last years, the problem of façade colouration plans in historic town centres has not yet been considered in all of its aspects. The study on Sermoneta will serve as a pilot project to develop a consistent methodology.

R. Destro Bisol (ITA) has done research in archives and libraries on the historic development of Sermoneta and its colours and image. J. Malliet and E. Giorgi put together a prototype file for one building in Sermoneta, serving as a basis for the research on the methodology.

Göreme: Structural Conservation

During 1987, the studies for the consolidation of the rock churches in Göreme, Turkey, were provisionally concluded with the end of the Unesco contract.

Dr E. De Witte of IRPA, Brussels, investigated the effectiveness of two consolidants and two water-repellents. Rock samples from Göreme were treated with the products and submitted to an accelerated ageing test. These experiments were concluded with promising results. From 27 July to 5 August, Dr De Witte went on mission to Göreme for a series of on-site tests with the same products. At the Architectural Conservation Laboratory of the Middle East Technical University in Ankara, a team coordinated by Dr E. Caner continued research on the weathering mechanisms of the Göreme stone. Microclimatic data were collected in situ, and laboratory examinations were made on the petrographic, physical, mechanical and chemical characteristics of the weathered rocks.

Protection of the Architectural Patrimony in the Mediterranean Basin

Under an ICCROM consultant's contract, John D. Stewart (ARC82-CAN) has undertaken a research project on some 20 countries in the southern and eastern Mediterranean basin, each within a seismic zone. The aim is to carry out a critical study of the existing laws, administrative structure and policy for the conservation of the architectural patrimony in general, and for earthquake preparedness in particular. The resources used for this project were two-fold: first, a review of official and unofficial documents; second, direct solicitation of information from the national organizations concerned.

The documentation centres of Unesco-ICOM and Unesco-ICOMOS served as headquarters for research, as they maintain the largest collections of official documents relevant to this study. After a feasibility review of their holdings, active research commenced in August for a period of two months. Over 200 references were consulted, pertaining to the following topics: legislation, administrative structures, policy, conservation of archaeological sites, monuments, historic towns, conservation training, earthquakes.

Supplementary data were also sought directly from national organizations engaged in conservation. Questionnaires were distributed to governmental departments, Unesco missions and ICOMOS National Committees. The final report, expected in the spring of 1988, will consist of data sheets for each country with a resume of national legislation, policy, and major conservation interventions.

Symposium on "Current Knowledge and Theory Developments for the Conservation of Traditional Masonry Systems"

Alejandro Alva represented ICCROM at this event, organized in Bressanone, Italy, from 23-26 June by the Universities of Padua and Venice and the Polytechnic Institute of Milan, with sponsorship from ICCROM and several other national and private institutions.

The programme included the presentation and discussion of 36 papers on various subjects related to the theme of the meeting. Among these was a paper on "Computerized Recording of the State of Preservation of Building Surfaces of Monumental Importance", prepared by Jef Malliet, Daniela Ferragni and Giorgio Torracca. In addition, a poster section displayed a number of restoration works and specifications on commercial products for conservation treatments.

A Comparative Study of Urban Conservation Examples in Europe

This study was carried out by Fuat Gokce (TUR) and Anna Naruszewicz (POL), both ARC87. Its aim was to examine some significant examples of urban conservation projects

in Europe, in order to analyze and compare different methodological approaches and to draw conclusions on the development of urban conservation methodologies and their results in Europe. The study was limited to small and medium-size European towns. Metropolitan areas with historic centres were excluded because of their different urban context and problems.

In-situ Interventions during Archaeological Excavations

Anne Bossoutrot (FRA) did research in view of preparing a manual for archaeologists on structural problems, storage and security in-situ during excavations. A copy of this report is in the library.

ICOM Conservation Committee Working Group on Climate and Lighting Control

For the preprints of triennial meeting of the ICOM Conservation Committee, the working group coordinator (G. de Guichen) solicited papers from 30 potential authors. Out of 26 papers proposed, 17 were eventually selected. Little research is being done in the field of climate control, and we have encouraged the production of papers examining installations that have functioned for ten years or more. Just as with papers presented at previous meetings, a reader of the preprints of this working group has a fairly faithful image of the possibilities of controlling the climate in the absence of air conditioning. At the Sydney meeting, 14 authors presented their communications. A new group was formed with G. de Guichen as Coordinator, and Sarah Staniforth and Sadatoshi Miura Assistant Coordinators.

Workshop on the Architectural Survey and the Analysis of the Actual state of the Mediterranean Urban and Architectural Heritage

Prof. Tomislav Marasovic, Council Member, represented ICCROM at this Workshop, held in Marseille, France, from 18-20 March. The workshop was a follow-up to the seminar held in Split in May 1985 which focused on the problems of the protection of Mediterranean historic settlements in general, and another held in Split in April 1986 which was concerned with a number of demonstration studies on experiences in the protection and rehabilitation of selected historic settlements in the region. The objectives of this third workshop were: definition of a common methodology, unification of work methods and ways of presenting the documents, improvement of the work in progress, and initiation or launching of architectural surveying where no initiative along these lines has yet been taken. Fourteen Mediterranean countries, Unesco, ICOMOS and ICCROM are actively taking part in UNEP's Mediterranean Action Plan.

TECHNICAL ASSISTANCE

ICCROM Technical Assistance Programme (TAP)

1987 was a very good year for TAP. Not only did the programme reach more countries and institutes, but the office itself was reorganized to provide greater efficiency in processing requests and recording essential data. Feedback from the recipients continues to be very positive. The programme is coordinated by Maria Valys, with assistance from Elisabetta Campa.

Thanks to the continuous support of our benefactors, especially the Unesco World Heritage Fund, we were able to expand our activity significantly during the year. The number of requests processed (248) more than tripled, reaching six new countries and 45 new institutes from 31 countries, including eastern Europe and China, where great difficulty is encountered in acquiring much-needed materials.

The criteria used in determining eligibility for assistance are based on several factors. The request must be made by an established national institution, such as a museum or central laboratory. Equipment is sent only to institutions that have specially trained personnel, such as former ICCROM trainees, who will know how to use it properly.

The TAP "family" now numbers 88 countries with over 300 institutes on all five continents. During 1987, documentation, equipment and materials were sent to 8 Arab countries, 14 in Asia, 31 in sub-Saharan Africa, 17 in Europe, 14 in Latin America and 3 in Oceania. Distribution was as follows: 2069 publications, 275 subscriptions, 93 instruments, 500+ materials. In order to streamline our service, the TAP office has been thoroughly revamped. Uniform application forms have been devised for processing incoming requests. Other forms have been made for statistical purposes, and records have been computerized. The TAP bibliography has also been completely updated, and storage of publications rearranged to correspond to the new listings.

Algeria

14 April-12 May. At the request of the Algerian authorities, and under Unesco contract, K. and G. Hempel (GBR) undertook a short mission to conserve marble statues in the Cherchell Museum. This was the sequel to previous missions in 1980 and 1981.

Burma

28 December 1986-31 January 1987. Under Unesco contract and as part of the UNDP project BUR/78/023, ICCROM continued the conservation of the wall paintings and external murals of a pilot monu-

ment at Pagan, the temple of Kubyaukgyi. The team consisted of D. Zari (ITA), work-site leader, C. Giantomassi (ITA), R. Luján and P. Schwartzbaum, project coordinator. The project has an extensive didactic component and the work is undertaken with 19 trainees from the Department of Archaeology, and with the collaboration of two Burmese chemist-restorers, Messrs U Ba Tint and U Aye Maung (MUR84). This project contributed greatly to the recent decision by the Socialist Union of Burma to become a member of ICCROM.

Cuba

25 October-6 November. In the framework of a mission to Havana, under UNDP/Unesco Project CUB/86/017, J.-M. Teutonico consulted with various professionals of the Centro Nacional de Conservación, Restauración y Museología (CNCRM) on technical issues of architectural conservation. Topics included the conservation laboratories of CNCRM, technical aspects of work in progress in Old Havana, the possibility of creating a test yard for both analytic and didactic purposes, the study of environmental conditions to be carried out at the Castillo de la Fuerza, and possibilities for future collaboration between ICCROM and CNCRM in the areas of training, research, and technical intervention.

East Africa

Two missions were undertaken by J. Jokilehto to Africa as part of the UNDP/Unesco project for the promotion and coordination of training of African conservators for ar-

chitecture, museums and audio-visual archives. The first mission was carried out in Tanzania from 12-25 March, the second in Kenya, Zambia and Malawi from 17 August-1 September.

Information was gathered on the existing architectural heritage in East Africa, on the condition of historic buildings and towns, on current training programmes for building technicians, civil engineers, architects and town planners, as well as on needs in the field of architectural conservation and museum development over the next five to ten years.

The reports prepared as a result of the missions have already been discussed with Unesco and ICOM, who have carried out similar missions to West Africa, and with ICOMOS, who have organized a mission to the Côte d'Ivoire. A further evaluation of the material will be carried out for UNDP by early 1988 for a decision on the next phase.

India

25-29 January. A mission was undertaken by Sir Bernard Feilden and Poul Beckman (DNK) to inspect the Great Sun Temple at Konarak. The scope of the mission was to comment on the measures taken to date for structural consolidation and stone and sculpture preservation, to advise whether the 1903 filling of sand and masonry can be removed, and to comment on the presentation and management of this site with its status as world cultural heritage in mind. All arrangements were made by the Archaeological Survey of India (ASI), and air travel was covered by ICCROM.

This inspection visit was followed by another to the Taj Mahal, under Unesco contract and on ICCROM's behalf, organized by the ASI. The object was to discuss the geo-technical study of the foundations of the Taj Mahal complex. A detailed report of their recommendations has been submitted to Unesco.

Italy

Friuli, 16-18 June. At the request of the Consorzio per la Salvaguardia dei Castelli Storici del Friuli-Venezia Giulia, J.-M. Teutonico went to Spilimbergo to inspect the remains of the medieval castle of Toppo and to discuss the possibility of using the site as a training-worksite organized in collaboration with ICCROM to carry out the first phase of a comprehensive restoration project. Funds have since been raised by local authorities and facilities have also been created for student housing, classroom space, laboratory and drafting activities. Negotiations are under way to implement this project as a new didactic venture, potentially in 1989.



The fort of Lamu, Kenya, currently under restoration as part of the Unesco conservation plan for the historic town, under the direction of former ICCROM participants.

Mongolia

3-22 August. Under Unesco contract, a mission was undertaken by R. Luján to the Mongolian People's Republic. Its scope was to assist authorities of the Ministry of Culture and Academy of Sciences, in collaboration with UNDP, to evaluate problems of mural paintings restoration and the creation of a Research Laboratory for Conservation and Restoration of Cultural Property. Luján inspected mural paintings in the Amarbayasgalant Monastery, and also visited other monuments.



Amarbayasgalant Monastery. Local staff who facilitated ICCROM's first mission to Mongolia.

Peru

9-26 November. Monica Garcia was contacted by the Ministry of Foreign Affairs to help coordinate the organization of their Boundary Archive, which contains valuable and unique historical documents. After discussions with the authorities involved, the project was considered as a more exten-

sive undertaking, involving computerizing the ministry's entire archival system, linking it with the central data bank, and centralizing all the archives in an historic building, which will have to be cleared, restored and adapted to its new use.

Following an exploratory mission, a preliminary report and recommendations were presented to the local authorities. The priorities identified for the immediate future were as follows:

- Appointment of a Technical Consulting Committee which would supervise the global project.
- Contacting an architect with experience in archive design and adaptive reuse of historic buildings.
- Hiring an archivist capable of organizing, computerizing and supervising all the Ministry's archives.

Puerto Rico

28 April-17 May. At the invitation of the government, J.-M. Teutonico spent two weeks in San Juan to initiate materials analysis at the Cuartel de Ballajó. This massive, 19th century building, ex-headquarters of both the Spanish and American armies, is to be restored under the direction of Project Architect, Otto Reyes (ARC88), for museum/gallery space and various university facilities as part of the 1992 celebration of the 500th anniversary of Columbus's discovery of America.

Phase I of the Materials Analysis involved establishing a sampling methodology, taking the requisite samples, and setting up a small conservation laboratory on-site to carry out all necessary analyses. This last feature was a truly innovative aspect of the project, avoiding the expense and inconve-

nience of transporting samples for analysis as well as creating a lasting conservation resource for Puerto Rico. The laboratory will continue to function after completion of the project.

From May to December, all laboratory analyses were carried by Beatriz del Cueto and Gus Agamemnon Pantel, both trained at ICCROM in 1985. Ms. Teutonico returned to San Juan in December to verify and interpret results and to provide specifications of appropriate restoration materials. The project is expected to enter the construction phase in the fall of 1988.



San Juan: Riding in a cherry picker, J.-M. Teutonico took mortar samples at all heights of the building.

Turkey

Göreme, 19 September-3 October. In collaboration with the local conservation team, I. Dangas (FRA-MUR75) continued work on the joint ICCROM/Turkish Ministry of Culture project for the conservation of the Byzantine wall paintings in the church of Karanlık Kilise.

CONFERENCES AND COOPERATION

Other Organizations

ICCROM representation on various boards and committees of other organizations continued throughout the year. This included attendance at the following meetings:

- GCI Advisory Committee. London, Marina del Rey (G. de Guichen);
- ICOM Executive Council Paris (G. de Guichen and Jean Taroni, former Vice-chairman of ICCROM Council);
- ICOM Conservation Committee Board. Dresden and Paris (G. de Guichen, S. Inman);
- ICOMOS International Training Committee. Warsaw (J. Jokilehto);
- MUSEUM editorial board. Paris (G. de Guichen);
- Unesco World Cultural Heritage Committee Board. Paris (J. Jokilehto);
- Biennial General Assembly, World Cultural Heritage Convention. Paris (J. Jokilehto).

Australia

3-10 September, Sydney. The 8th Triennial Meeting of the ICOM Conservation Committee was held in Sydney, with study tours and visits of conservation laboratories and several museums. C. Erder attended meetings of the Directory Board, and G. de Guichen participated as Coordinator of the Climate and Lighting Working Group. ICCROM continued its support of the Committee Secretariat in the person of S. Inman, Administrative Secretary. The new Directory Board was elected as follows: Chairman, Janet Bridgland (SPC83); Vice-Chairman, Steen Bjarnhof; Members: Ivan Gorine, Judith Hofenk de Graaff, Cliff McCawley, Ingo Sandner, Christoph Von Imhoff (SPC87), Sue Walston (SPC83). C. Erder is an ex-officio member. Over 45 participants attended this successful event. The Australian Organizing Committee, headed by Sue Walston and Colin Pearson, are to be congratulated for the superb organization.

Bulgaria

16-23 April, Sofia. Blanche Weicherding-Goergen, Member of ICCROM Council, represented ICCROM at a symposium organized on the occasion of the 30th anniversary of the National Institute of Historic Monuments. The symposium was followed by visits to principal restoration sites in Bulgaria.

Canada

21-25 June, Ottawa. The CIN Steering Com-

mittee met on 22 June at the Canadian Heritage Network Office and on 23 June at the Canadian Conservation Institute, which gave participants the opportunity of seeing both institutes. ICCROM was represented by Paul Perrot, Chairman of Council, and C. Erder. The Director extended his stay to visit the Heritage Canada offices and several conservation projects in Ottawa, as well as to meet the ICOMOS-Canada Chairman and other members to discuss future cooperation.

1-8 December. At the Canada Center for Remote Sensing at Ottawa, D.R. Chartier gave an invited presentation entitled, "The Relationship of Remote Sensing to Imaging Needs and Developments in the Conservation of Culture". He also held discussions with Prof. Ian Hodgkinson, Queen's University Art Conservation Program, which centred on the role of training programs in conservation research and the possibility of drafting interns to work on well-designed ICCROM projects. At McMaster University, Instructional Development Center, meetings were held with Dr Humphreys to discuss the development of didactic resources for teaching basic science (with particular reference to conservation). Some basic didactic materials have already been forwarded to ICCROM and there will be further consultations.

Chile

13-15 July. A meeting on Conservation Needs in Museums in Chile brought together the national museum community and external experts, including A.E. Charola from ICCROM. Recommendations were made to stress training at two levels: one to increase the awareness of high-level museum personnel with respect to preventive conservation, the other to develop the skills of conservator/restorers. The meeting was organized under the auspices of the Dirección de Archivos, Bibliotecas y Museos, the Museo Chileno de Arte Precolombino, the Museo Histórico Nacional, and ICCROM.

Federal Republic of Germany

26-27 January, Berlin. At the invitation of Dr Grote, Director of the Institut für Museumkunde, G. de Guichen went to gather information concerning the German project for training African conservators. Possible areas of cooperation were also discussed.

26-27 February, Oldenburg. Dr Helmut Bansa, Council Member, represented ICCROM at the inaugural meeting of the EURO CARE Scientific Committee. This first conference had the following three aims: defining industrial, conservation and scientific projects and preparing national grant

proposals in the frame of EURO CARE; establishing an information network between the participating groups; and planning the participation of other interested nations.

France

2-5 March, Paris. M. C. Uginet attended a meeting at Unesco to discuss the future of the common ICOMOS-ICCROM data bank. The present situation was reviewed with regard to the common thesaurus, the policy of expansion towards Unesco regional centres and the perspectives of a Unesco, ICOM, ICOMOS and ICCROM network. This was followed by a three-day session of the Content Review Board of CIN.

12-14 March, Strasbourg. At the invitation of the Fondation de l'économie sociale, G. de Guichen attended a seminar on industry and art patronage. He took part in two debates, namely "The Role of Business in Supporting Preservation of Cultural Heritage and Artistic Creativity", and "Industry and Art Patronage".

15-18 October, Paris. D. Chartier consulted with Christian Lahanier, Head - Laboratoire de Recherche des Musées de France, regarding participation in an EEC committee which will specify the requirements of a research-oriented imaging system for conservation applications. He attended some of the talks at the first meeting in France on conservation research - "Conservation et Restauration des Biens Culturels: Recherches et Techniques Actuelles". Chartier also consulted with Carole Milner (editor of French section IIC newsletter and Louvre conservator) regarding the continuation of her varnish research and the potential for a workshop on this topic.

Greece

14-18 June, Athens. At the invitation of the Alexander S. Onassis Foundation, Eftychia Greenway attended the ceremonies presenting the International Onassis Prizes for 1987 in the presence of the members of the International Committee.

26 September - 1 October, Kastoria. J. Jokilehto attended a seminar on Urban Conservation at the invitation of both Unesco and the Greek government.

17-20 October, Athens. J. Malliet attended preliminary meetings with officials of the Greek Ministry of Culture and with the organizing committee for the international conference on "The Structural Conservation of Stone Masonry" to be organized jointly by ICCROM, the Greek Ministry of Culture and the National Technical University of Athens, in Athens in the autumn of 1989.

Italy

19-20 January, Rome. The Steering Committee of CIN met at ICCROM to review network developments, discuss policy and management issues, and assist in establishing this international programme. Representatives of all the institutions involved in this multilateral effort attended the meeting. Participants discussed network goals and objectives, on-line access and users' training, alternative methods of dissemination, operating language, the development of additional databases and services, and geographic expansion to meet the information needs of given regions of the world.

25-28 March, Florence. E. Greenway attended a conference entitled "Europe in Transformation: The Cultural Challenge - Culture, Technology, Economy", organized by the EEC, the European University Institute and the City of Florence.

30 March, Rome. C. Erder represented ICCROM at a meeting organized by ENEA, Comitato Nazionale per la Ricerca per lo Sviluppo dell'Energia Nucleare e delle Energie Alternative. The theme was "Art as Science: Scientific Research through Art, or rather the Operation of Art through Science".

25-26 April, Ravello. C. Erder and J. Malliet participated in the Scientific Committee meeting of the European University Centre for the Cultural Heritage. Discussion focused on the Centre's current and future activities.

27-28 May, Rome. R. Marta represented ICCROM at a colloquium on "Colour and Treatments of Facades in Historic Buildings", organized by the city.

3 July, Rome. At the invitation of the Centro per la Formazione delle Maestranze Edili ed Affini di Roma e Provincia, A. Alva attended a seminar on "Products and Technology for Diagnosis and Interventions in the Restoration Fields".

Luxembourg

23-26 September. B. Weicherding-Goergen, Council Member, represented ICCROM at the Council of Europe symposium on Architectural Heritage and Rural Development, which was held in the Chateau of Bourglinster. The seminar was held at the same time as the General Assembly of Europa Nostra. The meeting was closed by the creation of a trans-frontier cultural "Rural habitat" circuit at Wellestein, the first to be launched in Europe.

Thailand

2-4, 11-14 September, Bangkok. While en route to, or returning from Australia, both C. Erder and G. de Guichen stopped briefly in Thailand, where ICCROM has been carrying out a project since 1979. They were welcomed by some 35 ex-ICCROM participants, all working in conservation.

The Director-General of the Fine Arts Department, Mr Thaveesak Sananarong, received the Director accompanied by high-level administrators from his department. Mr Sananarong also gave a dinner for the Director and United Nations/Unesco representatives in Bangkok.

C. Erder lectured on conservation of cultural property, and visited numerous local sites. He was also taken to the Sukhotai Historical Park and to Sri Satchanalai by their new directors.

Turkey

20-24 April, Istanbul, Marmara University. C. Erder took part in an international press seminar within the framework of the Unesco/Istanbul-Göreme campaigns. He also met with the mayor, Mr Bedrettin Dalan, to discuss various conservation initiatives in the city, and was on hand to inaugurate the ICCROM travelling exhibition on light and climate at the Central Conservation Laboratory. The director and three staff members of the newly-installed lab are former ICCROM trainees.

5-10 June, Bursa. At the invitation of the Director-General of Antiquities of Turkey, C. Erder, accompanied by J. Jokilehto and Prof. Giorgio Lombardi (ITA), participated in a seminar on urban conservation. The meeting was addressed to mayors and high-level administrators of Turkish historic towns and the central government, and was attended by over 200 participants. C. Erder presented a paper on international guidelines for conservation, G. Lombardi on experiences in conservation planning, and J. Jokilehto on urban conservation planning in Rome. Jokilehto and Lombardi gave talks for the conservation technicians of the Department of Antiquities and Museums in Ankara on 9 June and met the local experts responsible for the planning of historic centers.

United Kingdom

13-16 April, London. At the Third International Conference of The Heritage Trust, ICCROM was represented by Dr Tomislav Marasovic, Council Member, who chaired one of the sessions, and Sir Bernard Feilden.

8-11 July, London. G. de Guichen attended

part of the Jubilee Conference of the Conservation Department of the Institute of Archaeology, and presented a paper entitled "The Extraordinary Tale of a Forgotten Conservation Tool: The Spaghetti Hygrometer".

13-16 July, London. P. Schwartzbaum and R. Luján attended an International Symposium on the Conservation of Mural Paintings, jointly organized by the GCI and the Conservation of Wall Paintings Post Graduate Course of the Courtauld Institute of Art. Schwartzbaum also served as chairman of the session devoted to treatment. Schwartzbaum has acted as a visiting lecturer in this programme and is a member of its Board of Studies. His expenses to attend this meeting were provided by the GCI.

United States

13-19 February, Washington, DC. C. Huemer attended the 15th Annual Conference of the Art Libraries Society of North America. She was appointed to the International Relations Committee which administers the Society's participation in the Art Section of the International Federation of Library Associations.

26-27 March, Washington, DC. The GCI Disaster Planning Group met under the chairmanship of Luis Monreal, with Sir Bernard Feilden and J. Malliet taking part. The final draft of "Between Two Earthquakes" was approved for publication.

7-14 April, Marina del Rey, CA. G. de Guichen was invited to take part in the seminar, "Conservation Training Issues", financed by the GCI. The directors of the following programmes attended: Queen's University, Cooperstown/Buffalo, Winterthur, Hampton-Court, Copenhagen, Courtauld, Hamilton Kerr, New York, GLteborg, Churubusco and the ICR. Sylvio Mutal (UNDP/Unesco Lima) attended as an observer. Robert Ferguson and Janey Maw led the debates.

July. A. Alva has been invited to be a member of the advisory board of the Center for Preservation Research, a technical conservation facility of the Columbia University School of Architecture, Planning and Preservation.

7-15 October, Washington, DC. C. Erder and Sir Bernard Feilden attended the ICOMOS General Assembly. This Assembly was preceded by a meeting of the Advisory Committee which Sir Bernard attended in his capacity as Chairman of the U.K. National Committee of ICOMOS. Paul Perrot, Chairman of ICCROM Council, acted as Rapporteur General.

The General Assembly was extremely well-organized and included interesting visits for

each working group. The Charter for Historic Centres and Urban Areas was approved by the Assembly, which also made numerous resolutions, including one on the need for a Charter for Training. Many former participants of ICCROM attended the meeting. The next General Assembly will be held in Lausanne, Switzerland, and it is hoped that a special reunion for ICCROM alumni can be organized at that time.

14-16 October, New York. C. Erder had meetings with United Nations and UNDP officials to examine possible closer relations and activities with ICCROM in the field of conservation of cultural property.

9-10 December, Washington, D.C. At CAL, D. R. Chartier presented a paper entitled "Fundamental Chemistry of Vikane" to the fumigation research panel composed of the major contributors to the Vikane research project. This project is being carried out by GCI, CAL and the Canadian Conservation Institute. Initiated and sponsored by the GCI, the work requires continued interaction in terms of technical review and research design.

Vatican City

26-28 November. P. Schwartzbaum was named to a 14-member technical commission by the Vatican to evaluate and oversee the ongoing conservation of Michelangelo's frescoes in the Sistine Chapel. The Commission, composed of 11 art historians, 2 conservators, and a scientist, and chaired by André Chastel (FRA), met for the first time during this period, inspected the work and submitted a report to H.E. Cardinal Biaggi.

Yugoslavia

15-19 October, Skopje. J. Jokilehto attended a meeting at the Institute of Earthquake Engineering and Engineering Seismology (IZIIS) on the organization of training in Yugosslavia.

Friends of ICCROM Foundation, Inc.

In order to seek funds to further the goals of ICCROM, a Friends of ICCROM Foundation has been created in the United States. The officers are as follows: Ann Webster Smith, President; W. Brown Morton III, Vice-President; Thomas Taylor (ARC75), Treasurer; and Hiroshi Daifuku, Secretary. After the election of said officers, the Trustees appointed Paul Perrot as Assistant Secretary/Treasurer.

Paper Conservation Group Formed

On 17 March 1986, the "Centro di Studi per la Conservazione della Carta" was created as an association of experts and laymen interested in the various sectors of conservation and restoration of library materials, archival documents and photographs, and graphics on paper, parchment and leather. Before that date there was no center of this type in Italy with the scope of promoting and encouraging an exchange of information among public and private agencies, craftsmen, professionals, conservators and scientists, as well as collectors in general, at both the national and international level. The Center publishes a quarterly Newsletter and an annual bulletin. Since N°0 - October 1986 was issued, the number of members has reached 85, including some from abroad. The group is eager to expand its international contacts through its newsletter, and would be very glad to know of any specialists in this field who might be visiting Italy. Their address: Centro di Studi per la Conservazione della Carta; Via Feste Avieno, 92, 00136 Rome RM, Italy.

CCI Newsletter Issued

With the first issue in December 1987, the Canadian Conservation Institute now publishes its own bilingual newsletter, which will appear twice a year, in the spring and fall. The *CCI Newsletter* is an informal publication aimed at letting museum professionals know what is happening at CCI. The Institute's present orientation and future plans are briefly discussed, as well as conservation treatments performed in the various labs, scientific research projects, services offered to museums, upcoming events, staff changes, library acquisitions, etc.

The *CCI Newsletter* is available free of charge upon request. To obtain a copy of the December 1987 issue and of future issues, send your request to the Training and Information Division, C.C.I., 1030 Innes Road, Ottawa, Ontario, K1A 0C8, Canada.

French Conservation Prize Established

The "Société d'Encouragement Aux Métiers d'Art" has recently created national and regional prizes for excellence in conservation/restoration. The prizes will be awarded by a jury composed of representatives of the various professions and major national public agencies in France. Dossiers should be addressed to SEMA, Attention Olivier Brochet, 20 rue de la Boétie, F-75008 Paris, France.

ICCROM FRIENDS AND ALUMNI

With this issue, we are inaugurating a new column with news about former ICCROM participants, staff and lecturers throughout the world. Please send us *your tidings* for the next issue.



Tanzania: Ahmed Sheikh Ahmed (ARC83 - centre), with Amini M. Mturi, Director of Antiquities (right) in front of the Stone Town Conservation and Development Authority. The Authority was established in 1987 at Ahmed's instigation, and several rehabilitation projects have already been initiated.

Michele Arias Bernard (SEC81) has been appointed director of the Galería de Arte Nacional at Caracas, Venezuela.

Kamarul Baharin Buyong (ARC75) has been appointed Director of Antiquities at the Museums Department Malaysia in Kuala Lumpur. (National Museum, Jalan Damansara, 50566 Kuala Lumpur.)

Donald Del Cid (ARC76) received the Tulane University College Teacher Recognition Award for 1986-87.

Dieng Diagully (PREMA86) has been appointed deputy director of the National Museum in Conakry, Guinea.

Bertha Estela Benavides (ARC79) is now Director of Conservation of Cultural and Monumental Property at the Instituto Nacional de Cultura, Lima, Peru.

Albert France-Lanord, ICCROM consultant and lecturer, has recently completed a lifetime project: the first French translation of a sixteenth-century classic on metallurgy entitled *Agricola, De Re Metallica*. The elegant, limited edition (556 pages) is published by Gérard Klopp, B.P. 66, F-57100 Thionville, France.

Alain Godonou (PREMA86) has been appointed director of the new museum in Porto Novo, Benin. Alain married Yolande Agugh last July in a beautiful ceremony at Santa Maria in Trastevere, followed by a lively reception in the Intercultura garden. Many of the ICCROM family were on hand to celebrate the event.

After 15 years of curatorial experience at the Museum of the City of New York, **Steven Miller** (SPC78) has been appointed Assistant Director of the Maine State Museum in Augusta, and has moved north with his wife and child.

Ida Panicelli (SEC78), formerly inspector at the Gallery of Modern Art in Rome, has been named director of the magazine, *Art Forum*, in New York.

Gilles Perrault (SPC81) is on the faculty of a new, three-year training programme at the Institut d'études techniques et historiques des objets d'art, Ecole des beaux-arts, at Versailles. He is teaching wood sculpture: history and technique, gilding and polychromy.

Stefano Pulga (MUR84) has moved from Switzerland to the Val d'Aosta, where he is working as a free-lance conservator. He recently organized a 10-month course on archaeological maintenance for the local Superintendence. Via San Giocondo 10, 11100 Aosta, Italy.

The commuting days of **Giovanni Scichilone**, ICCROM lecturer in preventive conservation, will soon be over as he leaves his post as Archaeological Superintendent at Chieti to become the new director of the Pigorini Ethnographic Museum in Rome. With this development, ICCROM's ties with the museum will be strengthened even further.

Just published, *A Conservation Manual for the Field Archaeologist*, by **Catherine Sease**, who has also contributed to ICCROM publications. The book can be ordered from the UCLA Institute of Archaeology, 405 Hilgard Avenue, Los Angeles, CA 90024-1510, USA, for \$16.

Sydney's new Powerhouse Museum, dedicated to science, technology and the applied arts, is receiving international attention in the press. **Lindsay Sharp** (SEC77) is the director of this exciting, hands-on facility, inaugurated in March 1988.

In Memoriam

We regret to announce the death of Vasile Dragut, Rector of the "N. Gregorescu" Institute of Plastic Arts in Bucharest, Romania. He was active in the ICCROM Council for many years, serving on the Finance and Programme Committee, and was also elected President of the XIII General Assembly.



Vasile Dragut.



Hubert Howard.

Hubert Howard died in February at the age of 79. He was a founder of Italia Nostra and Director of the Caetani Foundation, and also a good friend to ICCROM over the years, ever disposed to support cooperative ventures such as the mural paintings workshops at the Caetani Castle in Sermoneta.

Guillermo Joiko-Henriquez, delegate of Chile to the ICCROM General Assembly in 1984 and 1986, died in January 1988 after a long illness. As head of the Centro Nacional de Restauracion and National Chairman of ICOM, he was a leader of the conservation community in his region, and initiated several ICCROM activities and missions in Chile.

Lucetta Amendola Liuzzi died in 1986. On secondment from the Italian government, she was ICCROM's librarian from 1959 until her retirement in 1973. She will be remembered fondly by staff and participants from that period.

Francesco Tomasi, who was employed by ICCROM for 18 years for the photocopy service of the Library, died on 3 July after a sudden illness. He will be missed by the staff who knew him and appreciated his work over the years.

MISCELLANEOUS

CALENDAR 1988

January-September

Workshop Series. Series of workshop for museum employees to examine and improve professional skills and practices. Washington, DC, U.S.A. Smithsonian Institution.

Information:

Smithsonian Institution
Office of Museum Programs
A & I Building, Room 2235
Washington, DC 20560, U.S.A.

1-5 June

16th Annual AIC Meeting. New Orleans, LA, U.S.A.
American Institute for Conservation of Historic and Artistic Works.

Information:

Shelley Fletcher
National Gallery of Art
Washington, DC 20565, U.S.A.

8-9 June

European Scientific Colloquium on the Mechanical Behaviour of Wood. Bordeaux, France.

Information:

Prof. P. Morlier
I.U.T. "A" de Bordeaux
F-33405 Talence Cedex, France

16-19 June

1988 Annual Conference and Meeting of the Association for Gravestone Studies. Lancaster, PA, U.S.A.
Association for Gravestone Studies and Pennsylvania Folklore Society.

Information:

Dr Thomas E. Graves
Conference Director
110 Spruce Street
Minersville, PA 17954, U.S.A.

29 June-1 July

Retrieval. An international 3-day forum on practical case studies in the retrieval of objects from archaeological excavations and their subsequent conservation treatment. London, U.K.
University of London.

Information:

Summer Schools
Institute of Archaeology
31-34 Gordon Square
London WC1H 0PY, U.K.

28 August-1 September

44th Conference and Congress of the International Federation for Information and Documentation (FID) on **Information-Knowledge-Evolution.** Helsinki, Finland. FID.

Information:

Rita Lauro
Finnish Society for Information Services
P.O. Box 1025
SF-00101 Helsinki, Finland

29 August-2 September

First Congress of the Australian Rock Art Research Organization. Darwin, Australia. AURA.

Information:

First AURA Congress
P.O. Box 216
Caulfield South, Vic. 3162, Australia

29 August-2 September

Using Scientific Methods for the Restoration of Historic Objects in Transport Museums. Prague, Czechoslovakia. International Association of Transport Museums.

Information:

Jean-Pierre Haldi
Direktor
Schweizerisches PTT-Museum
Helvetiaplatz 4
CH-3030 Bern, Switzerland

September

Archaeological Wood Symposium. Los Angeles, CA, U.S.A.

Information:

Dr Roger M. Rowell
USDA Forest Products Laboratory
One Gifford Pinchot Drive
Madison, WI 53705, U.S.A.

12-14 September

Vth International Congress on Deterioration and Conservation of Stone. Torun, Poland.

Information:

Institute of Conservation and Restoration of Cultural Property
Sienkiewicza 30/32
87-100 Torun, Poland

19-23 September

Engineering Geology as Related to the Study, Preservation and Protection of Ancient Works, Monuments and Historical Sites. Athens, Greece.

Greek National Group of IAEG.

Information:

1988 Symposium Secretariat
P.O. Box 19140
GR-117 10, Athens, Greece

19-23 September

IIC Congress: Conservation of Far Eastern Art. Kyoto, Japan.
International Institute for Conservation of Historic and Artistic Works.

Information:

IIC Office
6 Buckingham Street
London WC2N 6BA, U.K.

26 September-1 October

Leather - Parchment: History, Conservation, Restoration.
Offenbach am Main, F.R.G.
ICOM Conservation Committee Working Group.

Information:

Mr W. Schmitzer
Deutsches Ledermuseum
Frankfurter Strasse 86
D-6050 Offenbach am Main, F.R.G.

3-7 October

Symposium 88. Conservation of Historic and Artistic Works on Paper. Ottawa, Ont., Canada.
Canadian Conservation Institute

Information:

Canadian Conservation Institute
1030 Innes Road
Ottawa, Ont. K1A 0C8, Canada

10-14 October

UKIC 30th Anniversary Conference. London, U.K.

Information:

Victoria Todd
Executive Officer - UKIC
37 Upper Addison Gardens
Holland Park
London W14 8AJ, U.K.

17-22 October

First International Seminar on **Modern Principles in Conservation and Restoration of Urban and Rural Cultural Heritage in Seismically Active Regions.** Skopje, Yugoslavia.
RZZSK, IZIIS and ICCROM.

Information:

Vesna Kitanovska
IZIIS

1st International Seminar RII
P.O. Box 101
YU-91000 Skopje, Yugoslavia

18-21 October
International Colloquium on Archaeometallurgy. Bologna, Italy.
Università degli Studi di Bologna.

Information:
Segreteria "Colloquio Internazionale di Archeometallurgia"
Centro per lo studio e la conservazione di manufatti di interesse archeologico e artistico
Facoltà di Chimica Industriale
Viale Risorgimento 4
I-40136 Bologna BO, Italy

26-28 October
Gilding Conservation Symposium.
Philadelphia, PA, U.S.A.
Wood Artifacts Group of AIC.

Information:
Deborah Bigelow
Project Director
177 Grand Street
Newburgh, NY 12550, U.S.A.

2-4 November
Symposium on **The Preservation, Management and Conservation of Natural History Collections.** Pretoria, South Africa.
The Transvaal Museum.

Information:
Elizabeth Jones
Symposium Convener
Transvaal Museum
P.O. Box 413
0001 Pretoria, South Africa

3-4 November
20th Century Materials, Testing and Textile Conservation. Washington, DC, U.S.A.
Harpers Ferry Regional Textile Group.

Information:
Katherine Dirks
Division of Textiles Rm 4131
National Museum of American History
Smithsonian Institution
Washington, DC 20560, U.S.A.

18-19 November
Early Advances in Conservation. London, U.K.
Department of Conservation, British Museum.

Information:
Jane Golding

Department of Conservation
British Museum
Great Russell Street
London WC1B 3DG, U.K.

December
The Conservation of Ancient Egyptian Materials. Bristol, U.K.
Archaeology Section of UKIC.

Information:
Sarah Watkins
Conservation Department
City Museum and Art Gallery
Queen's Road
Bristol BS8 1RL, U.K.

CALENDAR 1989

5-8 April
International Conference on Structural Studies, Repairs and Maintenance of Historic Buildings. Florence, Italy
University of Florence and Computational Mechanics Institute.

Information:
Conference Secretariat
Computational Mechanics Institute
Ashurst Lodge, Ashurst, Southampton
Hants, SO4 2AA, U.K.

24-28 April
Methods of Conservation of Cultural Heritage. Lausanne, Switzerland.

Information:
François Schweizer - Verena Villiger
Direction of National Research Programme
16
Pavillonweg 2
CH-3012 Bern, Switzerland

23-26 May
Fourth International Congress on **Conservation and Industrial Development.**
Toronto, Ont., Canada.
Heritage Trust.

Information:
Heritage Trust
79 Cambridge Street
London SW1V 4PS, U.K.

19-23 June
CIB89. XIth International Congress on **Quality for Building Users Throughout the World.** Paris, France.
International Council for Building Research Studies and Documentation.

Information:
CSTB Relations extérieures
4 avenue du Recteur-Poincaré
F-75782 Paris Cedex 16, France

31 October-3 November
International Technical Conference **Structural Conservation of Stone Masonry (Diagnosis, Repair and Strengthening).** Athens, Greece.
ICCROM, Greek Ministry of Culture and National Technical University of Athens

Information:
Ministry of Culture
Direction of Restoration of Byzantine and Post-Byzantine
Monuments
10 Karytsi Square
GR-105 61 Athens, Greece

CALENDAR - 1990

ICCIH 1990. The conservation and presentation of the material remains of the industrialized society of 19th and 20th century, involving all the implications; recording, survey and study; conservation and preservation; restoration; presentation, use and adaptation. Belgium.
TICCIH - Belgium.

Information:
Conference Secretariat
c/o Bissegemplaats 6
B-8620 Bissegem, Belgium



Duane R. Chartier, ICCROM's new Scientific Programme Coordinator, has not only taken a close look at the organization's present and future computing needs, but has also evolved a more global vision of how new departures in modern information systems can serve the conservation community. From this viewpoint, we may well be on the verge of a breakthrough in sophisticated techniques of recording our heritage.

THE PERMANENCE OF DATA AND THE IMPERMANENCE OF WORKS OF ART

INTRODUCTION

The basic laws of thermodynamics can be easily translated into practical terms:

- 1) You can't win
- 2) You can't even break even
- 3) You can't get out of the game!

We can't beat entropy so why do we try? The second law of thermodynamics dictates that randomness in the universe must increase. Thus, the natural tendency of all systems is to maximize randomness and minimize energy. The preservation of order in the face of disorder is a war that is already lost; we can only win *battles* against the

degradation of materials but that may not be sufficient. If we can accept the fundamental impermanence of materials then, and only then, can we develop some alternatives for the preservation of cultural history.

The ideal of art conservation is to preserve both the form and the content of objects. Yet objects of art and natural history must be viewed in order to be of any historical or cultural value. The very act of viewing accelerates their inevitable demise. Ethical questions arise when considerable portions of objects can no longer be retained. What can be salvaged for the scholars and interested people of the distant future?

It is possible to create a record of essential characteristics that is itself "permanent". With laser, optical disk and other imaging technologies it is now possible conveniently to record immense amounts of data on objects of art. This inviolate and immutable encoded data can perhaps serve as a minimal substitute for the object for the distant future. In literature, the content is often more important than the form but, in art, the general perception is that the reverse is true. The preservation of ideas embodied in literature (regardless of the fate of the original vehicle) is analogous to the recording of the visual and physical data of art objects.

The necessity, adequacy and ethics of such an approach will be discussed in this presentation.

CONCEPTS OF TIME, PERMANENCE, REVERSIBILITY AND CULTURAL HISTORY

Because individual human beings live for such a finite time, it is difficult to comprehend permanence. In fact, the word permanence is used in an incredibly loose fashion. Examples of this are abundant in our culture. "Permanent" markers are more resistant to degradation or removal by common solvents, but they are hardly permanent, nor are the substrates they are used to write upon. The "permanence" ratings on artists' paints are only relative indicators of longevity. The plethora of common claims of permanence makes for a large degree of complacency with regard to the survival of objects. As far as the history of the planet is concerned, few, if any, objects or materials are permanent.

A common statement that conservators encounter is, "Well, it has lasted 3,000 years so I'm sure it will last another 3,000". This represents a naive concept of time, history and permanence. Although recorded history is barely 5,000 years old, the development of man spans a considerably longer period. The entire concept of ownership of any cultural property must be examined very carefully in relation to the value of works in the cultural record. We are all custodians and creators of cultural history. The continued existence of objects and ideas for the distant future is perhaps an extremely unrealistic goal, given the nature and degree of forces that oppose the continued survival of material structures. Nevertheless, it is an ideal worth pursuing.

Another question that is commonly asked is, "Why do we want to save everything anyway?" We are part of the dynamic process of history, and judgments as to the value of particular works at a particular time are important historical information. The definition of cultural property, as suggested by the IIC-CG, is:

"Objects that are judged by society to be of particular historical, artistic or scientific importance."

This is indeed a very good definition on the surface and it recognizes the importance of the dynamic process of creating an historical record. Still, close scrutiny in the light of an understanding of cultural and historic practice reveals several problems. The first is that society, more often than not, does not make any significant judgments as to the cultural value of most objects. Society is often clear on what is considered to be part of the high art tradition at any one time but very few works or objects can be placed in that category. The fate of the others, which, in total, make up the cultural record, is left to chance. Proper use of recording technologies could help to minimize gaps in the cultural record and provide a better statistical representation of the variety and types of works significant to a historical understanding of a culture.

ART CONSERVATION IS A "COUNTER-ENTROPIC" PROCESS

Creation of order from disorder is a counter-entropic process that requires a net expenditure of energy. The creation of art itself is such a process, and there are consequences. It is a theoretical impossibility to keep a physical work of art intact in the face of all degradative processes which are both energetically and entropically favored.

In accepting the consequences of thermodynamics we must integrate the fact that art conservation can, at best, slow the rate of inevitable deterioration of objects. Many modes of deterioration are considered by conservators but others are often ignored. Conservation intervention itself can be a contributing factor to increased rates of deterioration (e.g. intensive washing of metal exposes fresh metal surfaces to oxidative corrosion even if great precautions are taken).

One of the most emphasized aspects of modern conservation is stability of environment. This is seldom obtained for any length of time even in expensive new buildings. Systems fail and the failure rate will increase as a building gets older. An "ideal" environment is a panacea from both the building maintenance point of view and from consideration of ideal conditions for individual materials, which are often mixed in display.

Loans are a necessary part of the modern gallery and museum business, but the transportation of art is inherently risky and exposes objects to changes in environmental conditions regardless of the care taken to minimize the changes. This is yet another factor in the degradative process.

PARALLEL APPROACHES IN DOCUMENTATION AND CONSERVATION

It is not being suggested that conservation efforts be abandoned, but it should be clear that if we wish to provide the best possible cultural records to the future we must entertain a rigorous documentation of the appearance and condition of objects. Every effort must be made to maintain the form and content of objects but the form is basically perishable. Therefore we should consider the content: the message relayed by the object in its cultural context and the recordable physical aspects of the object. It is at this point that modern information technologies can help us a great deal towards the goal of visual documentation. A working visual documentation system requires rapid access, massive storage and medium-to-high resolution digitized images of objects in order to be a credible documentation and research tool.

WHAT IS AN IMAGE?

We are surrounded by "images" in the ambient world, but even more so in the field of cultural conservation and research. However, people often take images for granted and they do not consider the essential nature of images microscopically, macroscopically and physiologically. The process of vision itself is inherently digital in nature, as the cortical "image" is built from nerve impulses from the eye and is given meaning by complex cognitive processes and a lifetime of conscious training. Photographs are, microscopically, silver particles or dye molecules that have been differentially exposed to light to form a pattern of something that we may or may not recognize in the physical world. Paintings are particles of pigments suspended in a medium and arranged in such a way to represent either real or abstract images. These simplistic approaches are a start towards a definition of image in terms of numeric processing.

A numeric image is formed by recording (scanning) an object at a very high resolution and recording, for each very small subsection, values of radiation intensity at one or many wavelengths and angles. This numeric data can then be recalled and reproduced at any time with the same intensity and color distribution. The data can also be manipulated numerically in order to scale it to compare to other images or to subtract an effect (an overlying varnish) or to do any number of previously difficult or impossible simulations of condition, treatment and mechanism of deterioration.

The image is formed from a matrix of its pixels (picture elements). It must be noted that there is a critical pixel size which the human eye can no longer detect as discrete. This, along with the rapid change in intensity, is the reason that we see continuous images on a television screen which is, in effect, a primitive digital imaging device.

VIEWPOINTS

DISADVANTAGES OF LARGE-SCALE "PERMANENT" RECORDING

For the first time in history it will be possible to fix the material 'facts' of an object in time. This may lead to the criticism that history, as a dynamic discipline, is being fundamentally changed by the recording of significant physical and contextual material about objects. There should be little fear of such an occurrence, as much of the reinterpretation of history is not based upon purely factual data from the past, but upon new modes of thinking. These modes will prevail at any time in the future. A corollary of the above criticism is that we will freeze our own biases into the cultural/historic record. This is indeed a possibility, but it has been a practice of every generation to this point. In fact, our cultural, aesthetic, political and technical biases are the hard-core facts of history and we need only try to be as representative and inclusive as we possibly can.

In the arts community there is a severe problem with allocation of resources, so resistance to expensive forms of advanced information technologies could be expected. Yet significant resources are already being used for human and machine-based documentation systems that are not efficient and that do not allow the potential for rapid access and long term stability in storage.

The gravest consequence of a competent information system is that there would have to be unusual standards for entering data because a choice of input material would imply a ratification of some cultural value. It would be necessary to provide contextual materials which may not be easily derived in an objective manner. This is again not a significantly different problem than that found with individual writers and archivists of the past who have imposed their own interpretations on their observations. At least by recording and having more data accessible we can perhaps increase the options for the future rather than limit them.

Another potential problem arises when art is created in such a manner as to be deliberately temporary. Conceptual art, "happenings" and earthworks, for instance, are problematic for the arts community to record in a representative manner. Nevertheless, we have managed to record some of the circumstances and background to these transient events and objects. The fact that the record is not complete does not reduce the value of the observations of the events and their impact upon thinking and artistic practice. Whether the artist prefers it or not, such events and works pass out of his hands and control into the public domain and are considered, by some, to be part of cultural history.

Certainly, none of the proposed disadvantages would lead one to abandon the possibility of recording as much physical data about objects as possible.

INFORMATION SYSTEMS

The key to data storage is digitization, as the data can be stored electronically with insignificant losses. The established error rates for electronic transmissions are already very low, and multiple transcription of encoded data does not measurably alter the quality of the entire set if care is taken in the system design. In essence, permanence is obtained as a trick... by indefinite copying with very small error or loss of resolution! Thus the arguments about the longevity of new recording materials can be addressed in light of the fact that we have already accounted for the degradation of the substrate. Besides, an honest assessment of present bulk information storage systems based on photographic processes would show the clear inferiority of the materials. The new mass storage techniques are already definitively more resilient and adaptable than materials like fiche.

CONCEPTUAL NEEDS IN IMAGING SYSTEMS

The technology used for remote imaging of earth and other planets using satellite-based systems is a good model for a digitizing imaging system which could be used to record objects important to cultural history. Because of the constraints of a space-based system, imaging systems had to be high resolution but photographic media were impracticable. Signals had to be digitized for transmission and analysis on earth. Each frame obtained with this technique is a mosaic of pixels which must be smoothed and reintegrated to form a continuous or analogue image.

The components of such automated geographic information systems would be very similar to those required for managing, and making available, high densities of information that can be collected on works of art. Contextual information and other working observations on the work of art would be integrated into the data collection and management system along with visual data.

The type of visual data that can be stored is as broad or even broader than the range of standard photographic techniques presently used for conservation documentation. Moreover, color and three-dimensional imaging technology is rapidly evolving, and will be of immeasurable value in this context.

Not only could the multispectral images of a work of art be stored but they could be overlaid and scaled using existing graphics technologies as an aid to collections maintenance, conservation and conservation research. Changes in the state of a work over time could be quickly ascertained by such a technique applied under standard conditions. At present this is a highly empirical task which is carried out to greatly differing degrees by trained person-

nel. Complex comparative tasks such as these are not performed well by the serial processing digital computers of today but such operations can be simply accomplished by optical neural computers which are under intensive development.

Numeric optical disks would be used for data storage. The compact disks now revolutionizing the music recording industry are distant relations of the same family. What is truly impressive about optical digital data disk storage systems is their very rapid access times and their low error rate. All present systems use lasers to read and write to a disk with an extremely high data density.

WHAT DOES THIS MEAN TO CONSERVATION?

Conservation has the dual responsibility of preserving the form or material structure of objects as well as the content, intrinsic data or contextual information associated with objects. At present, documentation of the exact state of objects, their appearance and their history is not performed in a systematic manner. The data that is recorded is generally quite difficult to access. If an object is doomed, in the long term, to disappear, then the responsibility to use the best available form of documentation becomes even more imperative.

With available information technologies, enormous quantities

of data about objects can be saved with a great degree of permanence. The job of archives and libraries would be greatly eased if a rapid-access mass storage system were implemented on a large scale. A centralized collection of optical disks could provide on-line access to an immense collection in real time. Every library could, theoretically become a Library of Congress. This may seem like a grand proposal but it is economically very sensible. Savings in the duplication of labor and materials, let alone in the costs of storage, maintenance and conservation of dispersed collections, would pay for the costs of system development many times over. In addition, the new technologies would open up new avenues and modes of performing research of all types.

The recording of the visual appearance of works of art and the preservation of that information is also an area that is desperately in need of a reliable, systematic recording philosophy which would be greatly aided by capitalizing on the capabilities of modern information systems.

WE CAN SAVE THE IMAGES OF OBJECTS EVEN IF WE CANNOT ULTIMATELY SAVE THE OBJECTS THEMSELVES.

This is a cannibalized version of a paper given at the Canada Center for Remote Sensing at Ottawa, combined with other reflections. The complete paper, with more technical details and a bibliography, is available on request from Dr Chartier at ICCROM.

OPEN FORUM

Marginal Reflections on the 8th Triennial Meeting on the ICOM Committee for Conservation

For the art historian, participation at a meeting of the conservation professions implies perforce a different perspective from that of the scientist, the conservator or the technician. It is less a precise vision of a specific field than a general impression of the events as a whole.

At first sight, the richness and diversity of the subjects connected with the issue can be rather disconcerting. But then this multitude divides into two principal groups. One distinguishes scientific contributions on one hand, and contributions of a more technical nature on the other. The former concern primarily the natural sciences and, to a lesser degree, the "social" sciences. The technical domain, in contrast, breaks down into more universal contributions with basic recommendations and detailed case studies of restoration work.

On the science side, the nonspecialist is impressed by the sophisticated processes, the use of the latest techniques or even, in the social sciences, by considerations of a strictly philosophical nature: one is dazzled by intellectual fireworks.

Just at that point, however, one begins to feel a bit uncom-

fortable. To what extent do these brilliant exploits serve the conservation of cultural property? Are they not sometimes in danger of becoming art for art's sake — or in this case, science for science's sake?

On the technical side, the image appears much less spectacular. Here, there is often more emphasis on useful work. Improvement of practical methods — transport, climate control or storage of objects, for instance — is perhaps not a very tempting task for the scientist, for, as the poet says, "ideas live easily side by side, but things collide rudely in space (Schiller, Wallenstein).

Thinking along these lines, one reaches the point of asking whether, ultimately, it would not be good to envisage a certain modesty in submitting all scientific investigation first to the object and to its conservation. A subsequent explanation of the "why" of a research project would lead to the revalorization of the auxiliary contributions. At the same time, such an approach, by its more humanistic nature, would facilitate understanding on the interdisciplinary level.

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Art Historian

KEEP IN TOUCH!

This Newsletter is issued once a year, in the spring, and reports activities of the preceding year. Reproduction and translation of the contents are not only permitted but actively encouraged. Should you make any translation, we would appreciate having copies for our files.

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