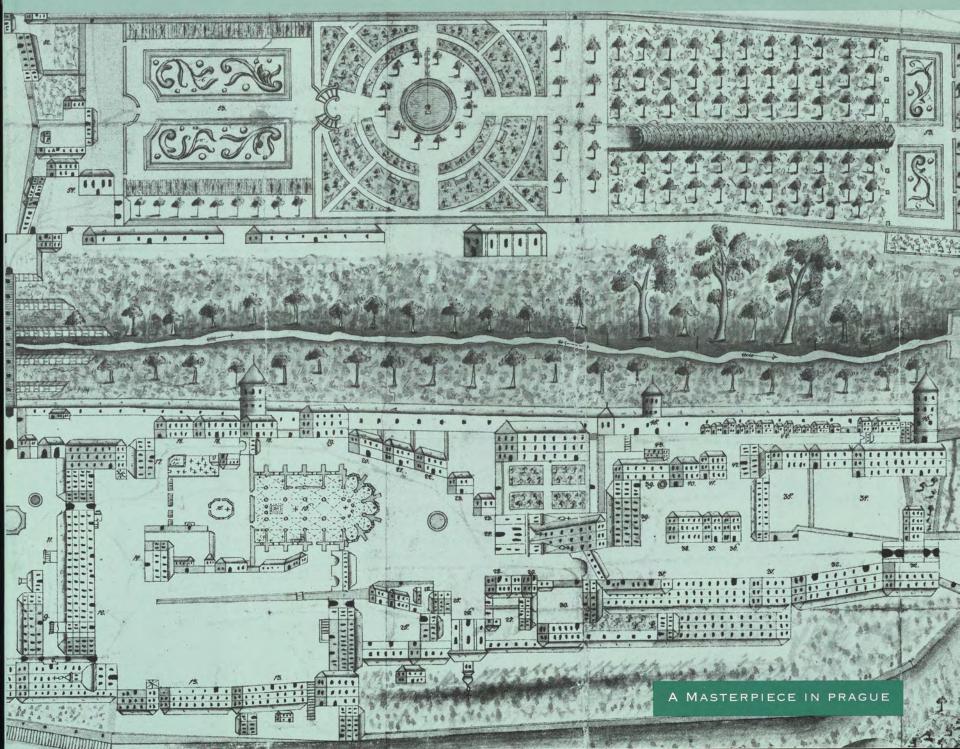
Volume IX Number III

# CONSERVATION The GCI Newsletter



### The Getty Conservation Institute Newsletter

Harold Williams

President and Chief Executive Officer, The J. Paul Getty Trust

#### THE GETTY CONSERVATION INSTITUTE

Miguel Angel Corzo Neville Agnew Rona Sebastian Marta de la Torre Martha Demas Margaret Mac Lean Dusan Stulik Jane Slate Siena Mahasti Afshar Director Associate Director, Programs Associate Director, Administration Training Program Director Special Projects Acting Director Documentation Program Director Scientific Program Acting Director Head, Institutional Relations Program Research Associate

#### CONSERVATION, THE GCI NEWSLETTER

Jeffrey Levin Jackie Gallagher-Lange Westland Graphics Editor Art Director / Designer Lithography

The Getty Conservation Institute is an operating program of the J. Paul Getty Trust. Other programs of the Trust are the J. Paul Getty Museum; the Getty Center for the History of Art and the Humanities; the Getty Art History Information Program; the Getty Center for Education in the Arts; the Museum Management Institute; and the Getty Grant Program.

1994 / Vol. 9, No. 3

Conservation, The GCI Newsletter is distributed free of charge three times per year, in English and Spanish, to professionals in conservation and related fields, and to members of the public concerned about conservation. The GCI works to develop a broad constituency for conservation and to promote an international appreciation of the value of our cultural inheritance and our shared responsibility for its preservation.

THE GETTY CONSERVATION INSTITUTE 4503 Glencoe Avenue, Marina del Rey, ca 90292, usa Telephone: (310)822-2299 / Fax: (310)821-9409

Front cover: A detail of a mid-18th century map of Prague Castle. The map is in the collection of the Library of the National Museum in Prague. Back cover: Globe photo by Dennis Keeley.



### [contents]

#### FEATURE

#### 4 THE VANISHING MASTERPIECE OF PRAGUE

In the 14th century Charles IV, the Holy Roman Emperor, ordered the creation of a large glass mosaic on the exterior of St. Vitus Cathedral in Prague Castle. Six hundred years later, *The Last Judgment* mosaic still adorns the Gothic cathedral. But for much of its existence, this rare work of art has gone unseen. Although it has been cleaned and covered with protective coatings many times, the mosaic eventually always vanishes beneath a whitish, opaque layer that covers its surface. Now the Getty Conservation Institute and the Office of the President of the Czech Republic are collaborating on a project that it is hoped will return the St. Vitus mosaic to visibility for years to come.

#### PROFILE

#### 8 PRESERVATION AND TRANSFORMATION:

#### A CONVERSATION WITH VÁCLAV HAVEL

The distinguished playwright, human rights activist, and now president of the Czech Republic discusses with GCI Director Miguel Angel Corzo the complex task of cultural heritage preservation in a period of historic political and economic change.

#### NEWS IN CONSERVATION

#### 10 DESTRUCTION AND LOSS: A REPORT ON CROATIA

The 1991–1993 war in the Republic of Croatia caused damage or losses at 47 of the nation's 143 cultural institutions. To survey the impact of the war on museums, galleries, and collections, the International Council of Museums, in collaboration with the Getty Conservation Institute, conducted a mission to Croatia. The ICOM member who carried out the mission gives a report on her findings and the problems that remain.

#### 12 COPING WITH THE SEISMIC THREAT:

#### BYZANTINE CHURCHES IN THE BALKANS

The Balkan region, in the midst of one of the most seismically active areas of the world, contains a wealth of cultural heritage including numerous Byzantine churches dating from the 9th to the 14th century. These structures, as well as other religious and historical monuments, remain at risk from earthquakes. The GCI has been working with experts in the region to formulate and test methods for the seismic stabilization that could benefit structures in the Balkans and elsewhere — measures that minimize physical intervention and that preserve cultural values.

#### GCI NEWS

#### 15 COURSES, EVENTS, AND PUBLICATIONS

Updates on Getty Conservation Institute projects, events, courses, publications, and staff.



# The Vanishing Masterpiece of Prague

by Jeffrey Levin



ITS MOST IMPRESSIVE HOUR MAY BE NIGHT.

When darkness removes most traces of modernity and lights from below shine upon it, Prague Castle looms over the red-tile-roofed buildings that surround it with a sweeping grandeur that knows few equals. The 20th century slips into the shadows, leaving behind the architecture of history.

For a thousand years, the castle on Hradčany Hill has been the political and religious heart of Prague and the lands of Bohemia. The seat of government for kings, emperors, and presidents, it grew over the centuries, becoming the largest medieval castle in existence.

Just as Prague Castle visually dominates the city whose name it bears, St. Vitus Cathedral dominates the castle. Located in the center of the castle grounds, St. Vitus is massive and imposing, its Gothic spires towering above the 18th century buildings that mark the castle's perimeter. Begun in 1344, it is the third church to stand on the site. Here, in this place, Bohemian kings were crowned. Here, too, they are buried. Among those reposing within the cathedral is the nation's patron saint, St. Wenceslas, a prince of Bohemia murdered in 929 by his pagan brother.

When daylight returns to Prague, St. Vitus remains the city's most striking architectural landmark. Yet even the sun does not fully reveal on its exterior one of the cathedral's great artistic treasures — a rare medieval glass mosaic. Out in the open, but nevertheless barely seen, it is obscured as the result of a combination of weather, climate, and the elements of its own composition.

#### The Last Judgment

Six hundred years after the death of Charles IV — King of Bohemia and Holy Roman Emperor — Prague bears witness to the imperial ruler's vision of his chosen capital. A man of education, diplomatic skill, and religious feeling, Charles transformed the city into a political, cultural, and economic center, establishing the first university in central Europe, planning a new district for the city (*Nové město*, or New Town), and initiating numerous public works that still stand: the Carolinum, the university's central hall; the tower of the town hall in Old Town square; and the Charles Bridge over the Vltava River, which divides the city. Of all of Charles' projects, the most ambitious was undoubtedly St. Vitus Cathedral. In 1370, the Emperor ordered the creation of an unusual work of art on the exterior of the cathedral's south entrance. The entrance, which faced the emperor's residence and served as the entry point for coronation processions, was to have over its three portals a glass mosaic depicting the Last Judgment.

Mosaic making was not a craft common to the Bohemian artisans of the time. Still, according to records, this large and complex glass mosaic was completed by the following year. In the center of the mosaic, Christ is encircled by a mandorla (an almond– shaped aura of divinity) surrounded by angels. Kneeling beneath this image are the saints of Bohemia and, below them, Emperor Charles IV and his fourth wife, Elizabeth of Pomerania. The panel to the left depicts heaven, while the right panel depicts hell.

The speed and quality with which the mosaic was executed fuels one of the lingering mysteries of its creation. Who performed the work on *The Last Judgment*<sup>2</sup> In technique and style, the mosaic resembles one found at Orvieto Cathedral in the Umbrian region of Italy, the single other Gothic building in Europe with a large exterior glass mosaic. Some experts believe that only Italian craftsmen (perhaps even those who worked on Orvieto) would have had the experience and skill necessary to accomplish in such a relatively short period the remarkable work in Prague. The fact that Charles IV himself had journeyed to Italy just a few years prior to the mosaic's construction adds weight to this contention.

But a close examination of the faces of the figures in the mosaic prompts a glimmer of doubt. The features are clearly Slavic in appearance, a physiognomy quite different from that found in the works of Italian mosaicists. How likely is it that Italians would have created facial characteristics such as these?

There are, unfortunately, no documents from the period that might have solved this puzzle. Such items as bills for the construction of the cathedral were archived beginning in 1372 — one year after the mosaic's completion.

While questions may always remain regarding the artisans who made the mosaic, its extraordinary quality is not in doubt. "This is a unique object of visual art which has no companion east of the Rhine and north of the Alps," says Dr. Eliška Fučíková, Director of the National Heritage Department of the Czech Republic's Office of the President. But for much of its existence, this rare work of art has gone unseen. Sitting in her office in Prague Castle, the ringing of noonday bells heard through her open window, Dr. Fučíková explains the mosaic's "sad story." Although it has been cleaned and covered with protective coatings on a number of occasions in its history, over time the mosaic eventually always vanishes beneath a whitish, opaque layer of corrosion products that cover its surface. Such is the case today.

"It's absolutely invisible," she says. "If you tell someone there is a mosaic there, the obvious question is 'Where?"

Standing in the castle court near the cathedral's south entrance, one can see that the mosaic is indeed obscured, as if dusted with a coat of chalk. Of the 31 shades of colored glass that make up *The Last Judgment*, all that emerge are a dull, rusty looking red, a pale green dimly reminiscent of tarnished copper, and gold, primarily in the upper left and upper right corners, from an early 20th century restoration. Figures can be seen, but most details and facial features cannot.

All in all, the mosaic appears bleached and faded, vanishing beyond discernment.

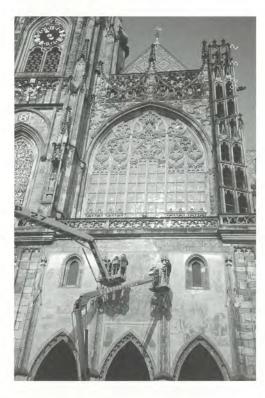
The Mosaic's Conservation

Since October 1992, the Getty Conservation Institute (GCI) and the Office of the President of the Czech Republic have been collaborating on a project to conserve the St. Vitus mosaic. This effort comes after a series of interventions on the mosaic, the first as early as the 15th century, followed by at least one or two in the next century. In 1619 the mosaic was reportedly plastered over, but it was later uncovered and restored. A series of restorations was conducted in the 19th century, the most drastic occurring in 1890, when the mosaic was removed from the cathedral wall in 274 sections and placed in storage until 1910, when it was reinstalled and repaired.

Beginning in the 1950s, the mosaic again underwent a number of treatments to deal with the contin-

The Gothic spires of St. Vitus Cathedral rise above the city of Prague. Photo: Guillermo Aldana.





Top: A detail of The Last Judgment mosaic depicting the face of Christ. An opaque layer of corrosion products covers the glass mosaic's surface. Photo: Dusan Stulik. Bottom: Using a cherry picker, conservators assess the mosaic's condition while a television crew documents their work. Photo: Neville Agnew. uing problem of clouding over. Each treatment proved successful only temporarily. Part of the problem was the Communist government's failure to heed the advice of the Czech conservators conducting the treatments who urged that a consistent regimen of cleaning be maintained.

By the mid-1980s, *The Last Judgment* had vanished again. When the GCI approached the government in Prague about developing a joint conservation project, the St. Vitus mosaic was at the top of the Office of the President's list of conservation priorities.

The objective of the project is the mosaic's thorough cleaning, followed by the application of a treatment that will dramatically slow the return of the opaque layer. However, as is standard with GCI special projects, intervention is being preceded by a complete review of existing documentation, a thorough study of the causes of the problem, and an extensive investigation of possible treatments.

A good deal of information on the mosaic's past restorations has been culled from the Prague Castle archives. The project team also consulted with Czech conservators who worked on the mosaic in recent decades, and reviewed their records. In addition, two Italian mosaic specialists who had worked on St. Vitale Church in Ravenna were brought in to examine *The Last Judgment* and report on its current condition. They concluded that while it will be a great challenge to avoid "a repetition, after restoration, of the corrosion process now in progress," the mosaic generally remains in good condition beneath the present corrosion layer.

It is already clear that the kind of glass used in the mosaic, which differs from Italian glass, is a factor in the corrosion process. The making of glass involves the melting of sand (i.e., silicon dioxide) with a flux such as soda (sodium carbonate). In central Europe, unlike Italy, soda was not easily available in medieval times, so glassmakers used potash (potassium carbonate), which was extracted from the ashes of burned wood.

"While soda and potash are similar compounds, glass made of potassium is less stable and more soluble than sodium-based glass," explains Dr. Dusan Stulik, Acting Director of the GCI's Scientific Program and project leader for the St. Vitus effort. "The potassiumbased composition of the St. Vitus mosaic's glass is a real problem." Another factor is the protective coatings of waxes and resins of various kinds that have been applied since the reinstallation of the mosaic. These coatings themselves have degraded and contributed to the mosaic's near opacity today.

The mosaic's problems are exacerbated by its location. While most Italian mosaics are situated in interiors or in some way sheltered, The Last Judgment is completely exposed in a climate with greater extremes than those found to the south. In addition to being subjected to wind, rain, and snow, the mosaic, on the south side of the cathedral, can heat to up to 52 degrees centigrade during the summer and drop to minus 20 degrees in the winter. An environmental monitoring station, installed in June 1993 by Shin Maekawa of the Getty Conservation Institute, recorded this information, as well as data on air temperature, relative humidity, dew-point temperature, wind speed and direction, and solar radiation. All the data are being integrated in the development of long-term conservation strategies for the mosaic.

#### Treating the Problem

Early in the project, the GCI team met with a group of leading Czech conservators to help develop a consensus on intervention. Prior to the Institute's involvement, there were two schools of thought within the Czech conservation community: one group believed that the mosaic should be removed, new housing found, and the original replaced by a copy; another group maintained that the mosaic should be treated in situ. After a series of discussions, the Czech group came to the consensus that treatment in situ was the appropriate approach.

Encompassing 84 square meters (904 square feet), the mosaic contains about one million tesserae, most approximately one centimeter in size. In April 1994, photographic documentation of the entire mosaic was performed. Three hundred images were made, detailing the mosaic's present condition. Transferred to photo compact discs, the images will enable conservators to create high-resolution condition maps of the mosaic.

Investigation has already begun into possible treatments to be applied to *The Last Judgment* once cleaning is complete. The GCI is working with the Fraunhöfer Institute for Silicate Research in Würzburg, Germany, testing several treatments including a composite treatment that has been used on medieval stained glass.

Part of the treatment testing program are ten small test mosaics and one large one. Each test mosaic contains several different tesserae including: (1) test glass, developed by the Fraunhöfer Institute, with a known corrosion rate; (2) original tesserae from the mosaic (discovered in archives and presumably left from the mosaic's removal in 1890); and (3) three types of modern mosaic glass. The test mosaics have all been treated with different materials being considered for use at St. Vitus. In May 1994, the large test mosaic was installed in the vicinity of the cathedral. The smaller test mosaics are being subjected to accelerated aging experiments at the GCI and in Würzburg; these experiments simulate cycling of temperature, humidity, UV radiation, and pollutant concentrations. The results will determine whether coatings can protect the mosaic from the extremes of climate to which it is exposed and, if so, what the maintenance cycles of cleaning or recoating will have to be.

While actual treatment of *The Last Judgment* is anticipated in early 1996, all involved, including the Office of the President, are emphasizing thoroughness over speed. "They want us to make sure that everything is done properly, so there isn't any pressure applied on us time-wise," says Dr. Stulik. "This kind of patience is unusual, but very appropriate given the mosaic's past problems."

Born and raised in Prague, Dr. Stulik well understands the desire of the Czech government to be certain that the St. Vitus mosaic is returned to visibility with great care. If the cathedral is the heart of Prague Castle, then the mosaic is arguably at its most precious spot. In a chamber of the cathedral behind the mosaic is the royal treasury where the Bohemian coronation jewels are stored. Beneath the chamber is the Chapel of St. Wenceslas. From the standpoint of history, observes Dr. Stulik, "this was the center of power and religion."

#### An Emperor's Legacy

When Charles IV died in 1378, St. Vitus Cathedral had been under construction for 34 years. But despite three and a half decades of work, the cathedral was centuries from completion. War, internal strife, and other problems interrupted the building's progress, and it was not until 1929, exactly a thousand years after the death of St. Wenceslas, that the cathedral was finished. By then, *The Last Judgment* mosaic had passed from sight numerous times, only to be resurrected by new generations seeking to recover Prague's medieval masterpiece.

Today in the Prague Castle courtyard in front of the cathedral's south entrance, tourists wander through, mostly oblivious to the unique creation close at hand. Occasionally a guide will point out the mosaic to the visitors gathered around him or her, and they will look up, squinting, trying to make out the stunning art that lies beneath the white layer of corrosion.

Perhaps some day soon they will need no one to show them *The Last Judgment*. Instead, as they turn the corner into the courtyard, the glass mosaic, its colors brilliant in the sun, will capture their vision without coaxing, and they will gaze with awe and amazement at an emperor's shimmering legacy.

Spanning the Vltava River is the Charles Bridge, constructed in the 14th century by Emperor Charles IV. Above it on Hradčany Hill, St. Vitus Cathedral towers over the walls of Prague Castle. Photo: Guillermo Aldana.



# Preservation

## a conversation with Václav Havel



Miguel Angel Corzo, Director of the Getty Conservation Institute, meeting at Prague Castle with Václav Havel, President of the Czech Republic. Photo: © Jirí Jíru.

VÁCLAV HAVEL — playwright, human rights activist, and now president of the Czech Republic — has had a distinguished literary career and a remarkable political one. His first theatrical works were produced in the 1960s, and since then he has authored numerous plays and essays. Honored for his literary explorations of the moral questions raised by bureaucratic and totalitarian regimes, he has received a number of awards, including the Austrian State Prize for European Literature, the Frankfurt Book Fair Peace Prize, the Sonning Cultural Prize, and many others.

A participant in the Prague Spring, the short-lived period of reform in 1968, Mr. Havel was by 1977 a major leader in his country's human rights movement, serving as spokesman for the leading dissident group, Charter 77. In 1979 he was sentenced by his country's Communist government to four and half years imprisonment for sedition.

Today, 15 years later, in one of history's more poetic reversals, President Havel occupies the same office in Prague Castle where Gustav Husák, the man responsible for his imprisonment, once sat. In this office — overlooking the Malá Strana district and the Vltava River that bisects the city — President Havel met with Miguel Angel Corzo, Director of the Getty Conservation Institute, to discuss the task of cultural heritage preservation in a period of historic political and economic change. They were joined by Dr. Eliška Fučíková, Director of the National Heritage Department of the Office of the President.

# &Transformation

Miguel Angel Corzo: Since 1989 when democratization began, what are some of the changes that have occurred in your country with regard to the conservation and preservation of the cultural heritage?

President Havel: It is not as easy as things seemed to be at the beginning. On one hand, some opportunities have opened up. In the case of many houses or even castles that have been restored to their original owners, restoration or conservation work has progressed past the point that was the case when the properties were owned by the state. And we can see in the streets of Prague, for example, many renovation works in progress.

But there is a dangerous aspect to this, of course. As has happened in other historic cities elsewhere, there is a threat that the rapid advance of a market economy may bring with it some lack of sensitivity to the cultural heritage. A new piece of national legislation on conservation of monuments is now being prepared which I hope will lay down rules for the approach to monuments, so as to avoid instances where, for example, someone would preserve the facade of a house but tear down everything behind it and replace it.

Legislation is essential indeed, but I imagine that there is another aspect which is also very important, and that is your moral authority as president. How can you create an awareness of the importance of the cultural heritage as president of your country?

Of course, my voice being the voice of the president is heard more perhaps than the voice of an ordinary citizen. Therefore I can help things by pointing them out in my public statements. In the area of constitutional power, I do not have many opportunities to exert a direct influence on these matters. But I can try to exert an indirect influence by helping to generate a favorable climate through my public statements and pronouncements. Because of contemporary society's pressing social needs, there are those who say that expenditures on cultural heritage preservation must wait. I know you have reflected on this dilemma, and I imagine that as a leader it must be difficult for you to reconcile these two demands on resources.

It is a very complicated task for the government and in particular for the parliament — to decide on the allocation of the budget funds to meet many needs, all of which are equally important. And of course the parliament, as an elected entity, should resolve these issues in a responsible manner and in accordance with the will of the citizens.

I do attach a great importance to having a variety of sources for the funding of monument conservation, particularly in those cases where funds may be lacking in the budget or where, for reasons of balance, they have to be allocated to other purposes. Right now preparations are under way for passing legislation on nonprofit organizations which should provide the legislative framework for alternative avenues of finance.

Eliška Fučíková: In the president's family, they have divided their volunteer duties, with the president taking care of monuments and his wife of charitable works. The president has in fact established a foundation in support of Prague Castle, while Mrs. Havel is chairing the Olga Havel Foundation, helping children, the disabled, and aged people.

A fair separation of tasks. Has the experience of being president changed or modified your view of the place of culture in society?

President Havel: I would not say that my work as a president has in any principal way changed my views concerning the position of culture in the spiritual life of society. But now that I can see into the complex decision making process of government, I realize that things may often be more complicated than they seem to be when looked at from the outside — especially now that the system for the promotion of culture is being changed in the context of the overall transformation of our economy. So in that regard, I have acquired new knowledge that has caused me to recognize that things are often not as easy as many might think.

There are so many monuments, paintings, manuscripts, and now photographs...our cultural heritage inventory becomes larger and larger every year. Because society doesn't have enough funds to save everything, certain decisions have to be made as to what stays and what is left to disintegrate. You are a writer, a thinker, a philosopher. How would you decide what stays and what goes? What sort of criteria would you apply?

In that respect I would rather listen to what the experts say to that because, after all, this is what they are for. Of course, some of the more conservative specialists in the area of monuments conservation would like to preserve everything, which of course is not feasible. But I do believe that an expert discussion is necessary, and I would be happy to respect the outcome of such a discussion.

As you are well aware, your office and the GCI are working together at St. Vitus Cathedral on the conservation of The Last Judgment mosaic. Can this type of cooperation serve as a model for the kind of collaboration this country can have with other cultural institutions in the world?

I think, indeed, that this is an excellent example of cultural cooperation, which is of great significance, both to us and generally. Of course, cultural heritage does not belong to us only. And there are certainly many other instances where we would welcome a similar kind of cooperation.

# Destruction and Loss: A Report on Croatia



The damaged head of a wooden sculpture of St. Anthony, evacuated from a church in Pridvorje, a town near Dubrovnik, Croatia. Photo: Barbara Roberts. In October 1993, the International Council of Museums (ICOM), with financial support from the Getty Conservation Institute, conducted a mission to the Republic of Croatia. Requested by members of ICOM, the ICOM National Committee of Croatia, and UNESCO, the mission's purpose was to survey damage to Croatian museums, galleries, and collections caused by the war of 1991 to 1993 and to identify what assistance is most needed.

As the ICOM member who carried out the 1993 mission, I returned from Croatia with vivid images of systematic destruction. Major works of art, many historic structures, and whole towns and villages with centuries of history have been destroyed or damaged almost beyond recognition. I saw houses that had been rendered uninhabitable by tanks, buildings demolished by land mines, and structures with rocket, howitzer, grenade, and shrapnel damage, some with faded UNESCO flags still flying — flags that offered no protection. A number of people interviewed believed that the flags actually drew fire.

Within Croatia are 143 institutions with 86 branch collections, containing approximately five million cultural objects. At the end of 1993, 47 of these institutions had experienced either direct damage or losses to their collections. This number could well be higher. The country's Museum Documentation Center (MDC) has little or no information for 8 of the 17 museums and galleries in Serbian-occupied Croatia. These 17 collections housed about 200,000 items.

The difficult plight of those caring for cultural property in Croatia has not changed appreciably since the mission occurred. Arts personnel, exhausted from the effects of permanent duty with insufficient food and wages slashed by inflation, face constant stress from a political situation that refuses to settle into peace. Many have died or are missing. There is, for instance, still no information on the fate of Professor Petrovic, art historian of Vukovar.

It is in Vukovar that the worst losses to museums and galleries occurred. Since its capture by Serbian forces, the contents of the town's museums — the Bauer Collection, the Vukovar Municipal Museum, the History Museum and the Ruzicka Memorial Museum — have either been destroyed or removed to Serbia. The buildings housing the last three collections were listed as national monuments; according to Croatian sources, they were all heavily damaged.

#### by Barbara Roberts

While in Croatia, I was shown a recording of a Serbian television program in which the Serbian Minister of Culture was discussing the major works removed from church buildings in Vukovar. The objects are purportedly being held "for conservation and safekeeping and will be returned to a rebuilt home

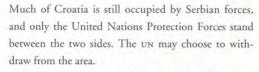
in Vukovar at the end of the war." The ICOM Advisory Board Committee, meeting in Paris in June 1994, recommended that the Council of Europe and ICOM conduct a joint mission to Croatia and Yugoslavia to discuss the fate of the Vukovar collections.

During the 1993 mission I spoke with numerous brave and dedicated museum personnel, librarians, government staff, monks, and private citizens who have individually or in small groups, amid a brutal war, managed to protect the greater part of the movable cultural property within Croatia's borders. Through their efforts, relatively few of the nation's collections sustained direct damage.

However, despite success in removing many public collections from the dangers of warfare and seizure, these collections remain threatened. The finest of Croatia's national collection — including works from the Neolithic period, antiquity, the Renaissance, the 17th and 18th centuries, and the modern age — have been placed in storage sites that lack climate control, sufficient shelving, and, in many instances, decent roofing. These repositories are now a major cause for concern. Within the first weeks of hostilities, the country was denuded of packing supplies, and the result is that few objects are adequately protected. Serious damage is occurring from high humidity, extreme temperatures, insects, rodents, and a lack of resources to retrofit storage areas and conduct basic treatments. Storage areas are jammed with collections material, and handling space is limited.

The scarcity of museum guardians and the virtual nonexistence of alarm systems pose a genuine problem for the security of evacuated materials. There is a clear risk of theft. The international museum community should be on guard for objects from Croatia appearing on the art market.

Neither the Ministry of Education and Culture, the Institute for the Protection of Cultural Monuments, or the MDC have vehicles equipped for the transportation of artworks. Works cannot be exhibited or moved in safety until there is regional peace.



Small steps are being taken as a result of the ICOM mission report, which was published by the Council of

Europe in April 1994. The American Association of Museums is planning an exchange initiative to coincide with their 1995 annual meeting in Philadelphia. The ICOM Conservation Committee has been requested to study how its members can assist, and ICOM is appealing to all national committees to do what they can to help. The ICOM National Committee of the Netherlands has donated ten thousand French francs for further assistance with ICOM's efforts in the region. In an independent effort, the government of Bavaria has restored two rooms for work on polychrome sculpture at the Château of Ludbreg in Slavonia, Croatia.

Colleagues abroad can support their hard-pressed counterparts in the region by providing supplies for emergency preventive maintenance treatments and subscriptions to professional publications, offering opportunities for training, raising funds for transport vehicles, and building informal contacts.

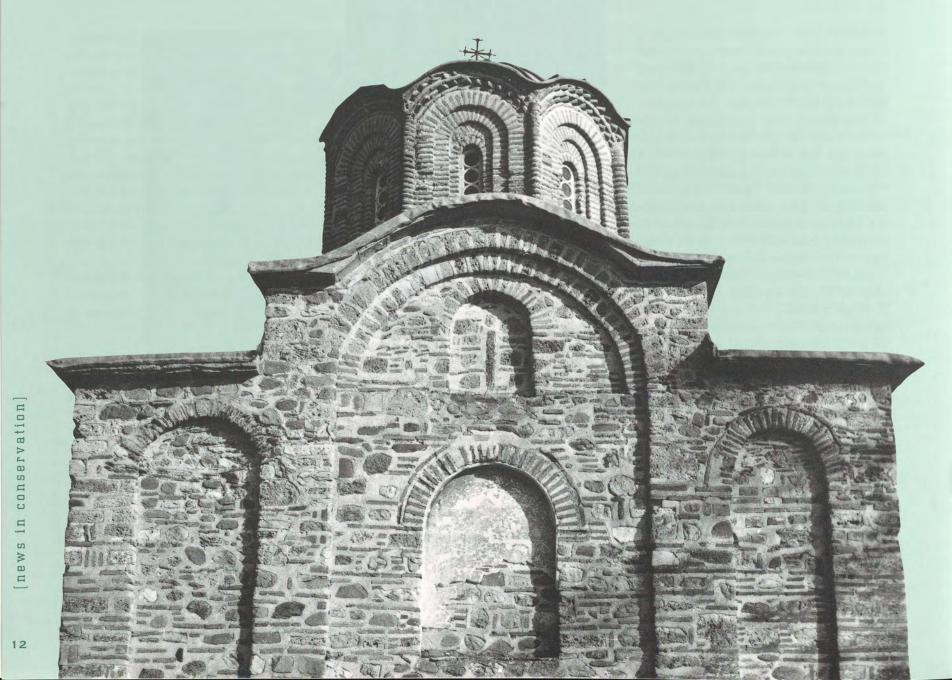
Once a peace agreement is signed, the region will require a major initiative for the long-term reconstruction, conservation, and preservation of cultural property. For international assistance to be effective, priorities will need to be established by the government of Croatia, in tandem with the Ministry of Education and Culture, the Institute for Restoration, and individual institutions. Similar actions will be necessary for the cultural property that remains in Bosnia–Herzegovina. A disciplined, professional, and well-planned internal and international joint effort can help save the diverse cultural property of the region for the next millennium.

Barbara Roberts is a conservator and consultant based in Seattle, Washington.

Above: A war-damaged fountain in the streets of Dubrovnik. Photo: Barbara Roberts.

# COPING WITH THE SEISMIC THREAT: BYZANTINE CHURCHES IN THE BALKANS

by William S. Ginell



In 1963 a devastating earthquake struck Skopje, Yugoslavia, destroying a large part of the city. Not only was the city's economic, social, and political life virtually paralyzed — its cultural property loss was catastrophic.

Skopje, today the capital of the Former Yugoslav Republic of Macedonia, is in the midst of one of the most seismically active areas of the world, a region that stretches from the western end of the Mediterranean Sea through North Africa, Italy, the Balkans, Greece, and Turkey, and on into central Asia. Temples, monuments, defensive structures, and buildings have all been subjected to destructive earthquakes that have raked the area for countless centuries.

The southern Balkan region historically has been ravaged not only by quakes but by a series of invading armies that preceded the establishment of a variety of cultures whose art and architecture survive to this day. Important remnants of this heritage include numerous Byzantine churches dating from the 9th to the 14th century. The interiors of these churches, still in daily use, were originally covered with frescoes, many of which have survived. The earthquake risk remains for these structures, as well as for other religious and historical monuments. Their destruction or damage would constitute an irreplaceable loss not only to the culture of the region but to the world.

#### THE SKOPJE PROJECT

Since 1985 the Getty Conservation Institute has promoted emergency preparedness and the development of preventive measures to protect cultural heritage from disasters such as earthquakes. As part of its efforts, the GCI in 1990 established a collaborative research program with the Institute of Earthquake Engineering and Engineering Seismology (1ZIIS) of the University "St. Cryil and Methodius" and the Republic Institute for the Protection of Cultural Monuments (RZZSK) in Skopje to study seismic stabilization of Byzantine churches. These institutes offered the expertise of highly experienced profession-

Left: The 14th century Byzantine Church of St. Nikita, located near Skopje. Above right: A medieval fresco of the Archangel Michael in the Church of St. Nikita. Photos courtesy of the Institute of Earthquake Engineering and Engineering Seismology in Skopje. als and modern experimental facilities to test retrofitting measures that could benefit structures in the Balkans and elsewhere.

Dr. Predrag Gavrilović, Professor of Seismic Engineering at 12115, and Lazar Šumanov, a conservation architect and Deputy Director of RZZSK, were the project's principal investigators. Together they assembled a team of specialists in art history, architectural conservation, chemistry, archaeology, geophysics, and



engineering. From the beginning, the objective was to develop methods that minimized physical intervention and that preserved the cultural values of the churches.

Typical Byzantine construction in the Balkan region is characterized by walls consisting of two outer faces of stone and brick set in lime mortar as well as a core between the faces filled with rubble set in lime mortar. About every meter up the wall were horizontal belts of brick or timber which provided continuity and ductility to the structure. Because the rubble cores of the walls are structurally weak, building stability was achieved by making walls and mortar joints very thick. However, as the mortar deteriorated with age and the timbers rotted away, the buildings' vulnerability to earthquakes increased.

The Skopje research program had three phases. In the first phase, data were collected on 50 existing Byzantine churches, including information on the topology of the structures, past conservation efforts, soil and meteorological conditions, and the historic, cultural, and artistic features of the churches. Preliminary structural analyses were made and possible repair and strengthening concepts explored. Ultimately, four churches were selected for detailed investigation, each representing a major type of Byzantine church architecture typical of the region: basilica, single nave, multidome apses, and single or five-dome churches with a cross-shaped interior (an "inscribed cross"). Most of the 50 churches studied fell into the last category.

The program's second phase included: definition of seismic parameters for the four specific church locations, studies of the physical-chemical properties and bearing capacity of building materials, experimental measurements of the dynamic characteristics of selected structures, and development of approaches for repair and strengthening. A major component of this phase was testing, on a seismic simulation shake table, of a scale model of one prototype church, before and after retrofitting.

In the final phase of research, analysis of the data, development of mathematical models, and vulnerability functions for various parts of church buildings were used to create general recommendations for retrofitting Byzantine churches.

#### THE CHURCH OF ST. NIKITA

The prototype chosen for modeling and testing was the Church of St. Nikita, located on Skopska Crna Gora, west of the village of Banjani, near Skopje. While there is no record of its date of construction, indirect evidence based on the church's frescoes (painted by two prominent medieval fresco painters, Mihajilo and Evtikie) suggests that St. Nikita was built in the early 14th century on the foundations of an earlier, Byzantine Empire church.

The church, part of a monastic complex, is a single-dome structure constructed in the shape of an inscribed cross. The walls are made of tuff (a weak volcanic rock) alternating with layers of brick set in lime mortar. Four interior brick columns support the massive brick tambour and dome.

The test model of St. Nikita, built on the 5-by-5 meter shake table, was 4.5 meters (14.8 feet) tall and weighed 21 tons. To create an accurate model, the project team measured St. Nikita's response to minor seismic activity in a series of simulation experiments, then, using the results, constructed a model that duplicated the real church's behavior during a seismic event.

To determine the actual seismic risk for St. Nikita, the team conducted geophysical surveys and, based on historical records, estimated the characteristics and return frequency of various types of earthquakes for the region. (As a rule, larger quakes occur less frequently than smaller ones.) These studies formed the basis for the computer-controlled earthquake simulations used in testing the model.

The original, undamaged model — extensively instrumented — was subjected to three types of earthquakes of varying intensity and duration. Twelve tests were performed, with intensity levels progressively increased. During the testing, the dome vibrated strongly. The model's first cracks appeared in the dome at a low intensity level, but no cracks occurred in the lower part of the structure. The final test at four times this level caused numerous cracks and the model's structural failure.

Following these tests, the model was repaired by injection grouting of cracks and by structural strengthening. Bolted horizontal steel tie rods were incorporated at three levels within the rubble part of the walls in the areas where wood timber belts originally existed in the prototype.

At the base of the dome a horizontal band was attached. Vertical steel ties were applied in the tambour and anchored to the main walls. In addition, exterior walls were anchored to the foundation with steel ties, and the spaces around the ties were filled with grout to provide positive connections with the walls. Thus, in an actual retrofit of a real church, no evidence of the engineering changes would be visible.

The retrofitted model was subjected to the same earthquake simulations used in the original tests. It was found that the maximum above-ground-level forces decreased and the cracking pattern and crack



The scale model of the Church of St. Nikita, constructed to test seismic stabilization techniques. Photo courtesy of the Institute of Earthquake Engineering and Engineering Seismology.

location changed. Displacement values — the amount of movement of building elements — were reduced by half.

To study the structure's behavior after cracking and to estimate the damage from higher-than-expected earthquake intensities, the earthquake amplitude was increased to a level that statistically would occur in the region only once in a thousand years. This resulted in some additional wall cracking and damage in the upper parts of the church, but no structural damage.

According to Dr. Gavrilović, the tests in Skopje "showed that in the case of an earthquake of maximum expected intensity in the vicinity of St. Nikita,

> structural failure of the church, as it now exists, is likely and that seismic retrofitting should be undertaken."

> Indeed, the experiments on the model of St. Nikita indicate that the church's structural stability can be increased enough to prevent structural damage during a major earthquake. The project also demonstrated that through careful design, structural stabilization can be achieved while the ethics of conservation are respected. The techniques used would neither alter the external appearance of the church nor damage its interior frescoes or other significant features.

> It is expected that the analytical methods and retrofitting designs developed during this project will be applicable to the many historic structures of similar construction that are now at risk in earthquake regions throughout the world.

> William S. Ginell is Head of Architecture and Monument Conservation Research in the GCI's Scientific Program.

#### GLOSSARY

AISLE One of several walkways of a basilica that extends the length of the church in an east-west direction.

APSE Semicylindrical or polygonal extension on the east end of a church.

BASILICA Type of church having aisles, apse, nave, and often a narthex.

DUCTILITY The ability of a material or structure to deform under stress without fracture.

NARTHEX Western entry area into a church leading to the nave and aisles.

NAVE High central aisle of a basilica.

RUBBLE Uncut stone and brick used as random fill between two masonry walls.

TAMBOUR Cylindrical or polygonal drum base for a dome.



### NEW PROJECTS

#### Preserving Hominid Footprints in Tanzania

The Getty Conservation Institute and the government of Tanzania are collaborating on a project to conserve the 3.6-million-year-old hominid tracks at the site of Laetoli in northwestern Tanzania. The fossil footprint trail, preserved in volcanic ash, provides the earliest definitive evidence of man's ancestors walking upright and is considered one of the most important discoveries in the study of human evolution. The footprints have immense scientific and cultural significance as the earliest mark left by humankind on the environment.

"The Laetoli trackway's value goes beyond interest to the scientific community and easily captures the public imagination," said Martha Demas, who, along with Neville Agnew, is leading the project for the Institute. "The footprints have universal appeal for humanity inasmuch as we are able to identify directly and immediately — with the similarities in our early ancestors' appearance."

The 27-meter trackway, consisting of two parallel trails of footprints, was first uncovered by Dr. Mary Leakey in 1977, not far from Olduvai Gorge, where she and her husband Louis made their famous discovery of fossil hominid

ILLERMO ALDAN



remains in association with stone tools. The Laetoli trackway is approximately a million years older than the deposits at Olduvai, and the absence of any stone tool industry at this early date provides clear evidence that bipedalism preceded tool making.

Following its excavation and documentation, the Laetoli site was reburied as a protective measure. But since then it has undergone deterioration and damage due to its remoteness, the growth of trees on the trackway, and natural erosion. An assessment of the trackway's condition was undertaken by a joint Tanzanian-GCI team in 1993. Re-excavation of a 3-by-3 meter area revealed the intrusion of acacia tree roots, which have caused disruption of the tuff (hardened volcanic ash) layer, and damage to individual footprints. The team also observed that sand and gravel from the reburial fill had become embedded in the rather soft tuff and that the site was suffering from surface erosion. As a result of this campaign, the need to kill the trees causing the damage and to stabilize the site against erosion were identified as priority actions.

In June 1994 an agreement formalizing the project was signed in Dar es Salaam. In August 1994 a team of Tanzanian and Getty Conservation Institute experts completed a two-and-a-half-week campaign that focused on killing the acacia trees, mapping the site, and undertaking stabilization measures such as rainwater diversion to reduce erosion.

The project's first full-scale conservation and documentation campaign will be undertaken in 1995 by an international team of archaeologists, conservators, scientific photographers, and other specialists, including scientists from Tanzania. The team will re-excavate half of the trackway, remove tree roots, and stabilize the fossil surface. Conservation of the remainder of the trackway should be completed in 1996.

The site, in a remote area without easy access, is not amenable to public display. The trackway will therefore be reburied to ensure its long-term survival. However, the Laetoli exhibit at the Olduvai Museum will be enhanced using casts of the trackway and other didactic material produced by the project team.

#### Conservation of Rock Art in Baja California

In April 1994 the Institute launched the first field campaign of its Special Project on rock art conservation at the cave of El Ratón in Baja California. The outstanding nature of the prehistoric paintings in a number of caves in the Sierra de San Francisco, in the center of Mexico's Baja California peninsula, has recently been more widely acknowledged with their inclusion in UNESCO's World Heritage List.

The project aims to record and document the condition of the paintings at El Ratón and to monitor their deterioration through natural and human causes. A further important objective is to work with the local authorities and inhabitants to design a management plan for these sites, which are now receiving an increasing number of visitors. In the three-week campaign in 1994, the GCI team, directed by Nicholas Stanley Price, Deputy Director of the Institute's Training Program, concentrated on basic documentation of the site and its paintings. In addition to standard recording and survey techniques, photogrammetry was used by a team from Heritage Recording Services in Canada to map the very difficult topography of the El Ratón site and its paintings.

With the aim of providing training opportunities for Latin America, the team includes four participants from Argentina, Bolivia, and Mexico with backgrounds and experience in conservation or in rock art studies. The project is organized jointly with the Instituto Nacional de Antropología e Historia (INAH) of Mexico, the Governor of the State of Baja California Sur, and Amigos de Sudcalifornia, a nonprofit conservation association in Baja California.

Four additional field campaigns are planned.



#### Conservation Center in St. Petersburg

The Getty Conservation Institute is joining with the Russian Academy of Sciences and the city of St. Petersburg to create the St. Petersburg International Center for Preservation, the first center for conservation in the region. The center's development follows five years of collaboration between the Institute and St. Petersburg's museums and libraries.

St. Petersburg is home to about 80 museums, 41 universities, 2,900 libraries, and over 8,000 historic buildings — an ensemble of cultural and historical wealth so extraordinary that UNESCO declared the city a World Heritage Site. Today this vast cultural heritage is threatened by a lack of resources and long-term preservation problems, despite the committed efforts of its professional scientists, museum and library personnel, architects, and cultural authorities who have been working in isolation throughout most of the 20th century.

The International Center for Preservation will address the problems of protecting the city's and the region's cultural heritage from disintegration and destruction. Incorporated in the United States and registered in Russia as a nonprofit charitable organization, the Center will conduct training, information exchange, and research in preservation and promote an awareness of the need for conservation. Its mission will be to institute a permanent infrastructure for training and interdisciplinary research so that preservationists throughout the former Soviet Union can collaborate with their colleagues nationally and internationally to develop, disseminate, and apply new approaches to conservation problems.

The city of St. Petersburg, through the Mayor's Office, is providing space to house the Center, while the Russian Academy of Sciences is supplying scientific and organizational expertise. The Getty Conservation Institute is offering organizational assistance at the international level, supporting pilot programs, and working to attract involvement from other organizations.

For additional information on the Center, please contact Jane Slate Siena, The Getty Conservation Institute, 4503 Glencoe Avenue, Marina del Rey, CA 90292; telephone (310) 822–2299, fax (310) 821–9409.

#### Symposium in Warsaw

In May 1994 Miguel Angel Corzo, Director of the Getty Conservation Institute, participated in a symposium in Warsaw, Poland, on "The Conservation of the Relics of Medieval Monumental Architecture."

The symposium, organized by the International Council of Museums (ICOM) Polish National Committee, the Society for the Preservation of Historical Monuments, and the Museum of the First Piasts on Lednica, was held in Warsaw's Royal Castle. In his address, entitled "The Ethics of Reconstruction," Mr. Corzo discussed the philosophical issues raised by the act of reconstruction in the context of conservation.



0

GUILLERMO ALDANA

#### Presentation of Quito Report

In June 1994 Miguel Angel Corzo and Neville Agnew, Associate Director for Programs at the Institute, presented to the Mayor of Quito, Ecuador, Dr. Jamil Mahuad Witt, a report on the GCI's collaborative work with the Municipality of Quito on preserving its historic city center (see volume VIII, number 3 of *Conservation, The GCI Newsletter*).

The report comprised descriptions of various initiatives undertaken in recent years. These include an architectural study of Calle García Moreno and a color history of buildings along the street; a scale model representing the rehabilitated street; meteorological monitoring in the historic center; a seismic colloquium held in June 1993; the continuing conservation and cataloguing work at the La Merced Library (undertaken collaboratively with the Getty Center for the History of Art and the Humanities); conservation grants by the Getty Grant Program to the Church of La Merced; technical advice provided to La Compañía de Jesús, including the report of Gordon Hanlon of the J. Paul Getty Museum on the gilding in the church; a public opinion/awareness survey; photographic documentation of the historic center; a 30-minute video on Quito's historic core; a full-color poster to promote public acceptance of the city center's rehabilitation; and a variety of articles in several publications.

Working closely with the Institute on its Quito projects is the municipality's Fondo de Salvamento and the Fundación Caspicara, a private, nonprofit organization.



#### GCI Receives California EPA Award

The Getty Conservation Institute received an award in October 1994 from the California Environmental Protection Agency (CAL/EPA). The award commends innovations in the development of environmentally friendly ways to combat pests. In honoring the Institute, CAL/EPA recognized the GCI's work with researchers at the University of California, Riverside, on the use of nitrogen, an inert gas, as a means to control pests in the museum environment. Presently, many museums rely on highly toxic fumigants to control pests that can damage and contaminate objects in a collection. The GCI's research has demonstrated that nitrogen treatment, which is completely safe, can effectively eliminate the pests that commonly plague museums and collections.

The CAL/EPA award was established in 1993 by its Department of Pesticide Regulation to encourage leadership and creativity in implementing reduced-risk pest management systems.

#### Nefertari Exhibition Opens in Rome

The exhibition "Nefertari: Light of Egypt," organized by the Getty Conservation Institute and the Fondazione Memmo, opened October 6, 1994, at the Palazzo Ruspoli in Rome.

This exhibit is intended to raise public awareness of conservation. Using a variety of media, it integrates history and the display of objects with a presentation of the conservation process, highlighting for the visitor the importance of conservation in cultural preservation.

Centered on the theme of discovery, the exhibition commemorates the unearthing of the tomb of Nefertari in the Valley of the Queens by Italian archaeologist Ernesto Schiaparelli in 1904, as well as the conservation of its wall paintings by the GCI and the Egyptian Antiquities Organization from 1986 to 1992. The 3,200-year-old tomb was constructed by the pharaoh Ramses II for his favorite wife and is considered one of the most beautiful tombs in the royal Egyptian burial grounds.

The exhibition combines a variety of elements from the ancient to the futuristic to describe the tomb's meaning, history, art, archaeology, and conservation. It includes more than 130 objects, some from Nefertari's original funerary furnishings. The Louvre, the British Museum, the Egyptian Museum of Turin, the Archaeological Museum of Florence, and Turin's Royal Library all loaned items to the exhibit. The exhibition includes material explaining the six-year conservation project under the direction of wall paintings conservators Paolo and Laura Mora, formerly of Rome's Istituto Centrale del Restauro.

A life-size replica of one of the tomb's chambers after conservation and Schiaparelli's original 1:10 scale tomb model are also on display. In addition, visitors can discover the tomb in 3-D with the latest system of real-time, interactive virtual reality. Using a joystick, they can travel anywhere within the tomb — both as it appears today and at the time of its discovery — and stop to look at conservation problems and treatment methods, or listen to recitations of the hieroglyphic inscriptions that appear on the wall paintings.

The exhibition will run at least through April 1995.

## RECENT EVENTS



#### Ancient and Historic Metals: Conservation and Scientific Research

Proceedings of a Symposium on Ancient and Historic Metals organized by the J. Paul Getty Museum and the Getty Conservation Institute, November 1991

Edited by David A. Scott, Jerry Podany, and Brian B. Considine

The sixteen essays in this volume reflect a wide range of research concerning methods for metals conservation, particularly in respect to ancient and historic objects. The variety of issues discussed includes considerations in the cleaning of ancient bronze vessels; the processes involved in bronze casting, finishing, patination, and corrosion; studies of manufacturing techniques of gold objects in ancient African and medieval European metalworking; techniques of mercury gilding in the 18th century; an investigation of patina in the classification of bronze surfaces from land and lake environments; an examination of bronze objects from the Benin Kingdom, Nigeria; the history of restoration of the Marcus Aurelius monument in Rome; the corrosion of iron in architecture; and applications of radiographic tomography to the study of metal objects.

304 pages, 81/4 x 113/4 inches

83 color plates, 77 black & white illustrations ISBN 0–89236–231–6, paperback, \$50.00

### PUBLICATIONS

#### Accelerated Aging: Photochemical and Thermal Aspects

#### by Robert L. Feller

The most recent volume in the Getty Conservation Institute's Research in Conservation series, *Accelerated Aging: Photochemical and Thermal Aspects* by Robert L. Feller, represents the culmination of more than 40 years of research by this noted scientist. The book focuses on the long-term performance of materials such as wool, dyes, and organic compounds; their resistance to change when exposed to environmental factors such as oxygen, ozone, moisture, heat, and light; and their physical durability with handling and use over time. Processes of deterioration are discussed based on speeded–up laboratory studies designed to clarify the chemical reactions involved and their physical consequences.

The Research in Conservation series publishes results of scientific research conducted by the Getty Conservation Institute and its individual and institutional partners, as well as state-of-the-art reviews of conservation literature. Other volumes in the series include: *Evaluation of Cellulose Ethers for Conservation* (1990), *Protection of Art from Atmospheric Ozone* (1990), *Epoxy Resins in Stone Conservation* (1992), and *Airborne Particles in Museums* (1993).

Dr. Feller is former director of the Center for Materials of the Artist and Conservator and is currently director emeritus of the Carnegie-Mellon Research Institute in Pittsburgh.

304 pages, 8½ x 11 inches 65 charts

ISBN 0-89236-125-5, paperback, \$30.00

#### Matte Paint: Its History and Technology, Analysis, Properties, and Conservation Treatment, with Special Emphasis on Ethnographic Objects

A special bibliographic supplement to Art and Archaeology Technical Abstracts, volume 30, 1993.

by Eric F. Hansen, Sue Walston and Mitchell Hearns Bishop

The 1,125 abstracts in this AATA supplement are introduced by a 62-page topical review that provides a guide to the range of literature it contains. The review highlights references of special interest, particularly with respect to the first three chapters, "History and Technology," "Analysis," and "Properties." The supplement includes considerable material from anthropology, ethnobiology, and coatings science, fields whose literature has not previously been commonly used by conservators. While the bibliography emphasizes ethnographic objects because of the frequency with which their paint problems are reported in the literature, similar problems are also found with matte paints used in architecture, contemporary art, folk art, and many other forms of applied art. The last chapter on "Treatment" provides a general framework through which to pursue appropriate responses to the wide variety of paint problems and treatment options.

The editors are Eric Hansen, an Associate Scientist at the GCI; Sue Walston, the former Head of Materials Conservation at the Australian Museum, Sydney; and Mitchell Hearns Bishop, a Research Coordinator in the GCI's Documentation Program.

#### 600 pages ISBN 0-89236-262-6, paperback

\$45.00 for individuals, \$65.00 for institutions

To order any of these publications, or for further information, contact Getty Trust Publications at P.O. Box 2112, Santa Monica, California 90407–2112, or telephone 310–453–5352 or (in the U.S. or Canada) 800–223–3431.

#### Picture L.A.: Landmarks of a New Generation

The catalogue to an exhibition held at Los Angeles City Hall at the end of 1994, this powerful and evocative book captures Los Angeles as seen through the eyes of the eight young people, ages 10 to 18, who were asked by the Getty Conservation Institute to photograph what they considered landmarks of their own human and physical environments, as well as public landmarks. For three months beginning in the fall of 1993, they covered an area from South Central to Beverly Hills, Hollywood to Venice, and East L.A. to Malibu. The result is a diverse and remarkable collection of images and words that expands our conventional notions of landmarks and provokes a sense of wonder and introspection. More than a book of photographs, it is a book of ideas that challenges us to reflect on how we are marked by, and interpret, the environment we live in.

Accompanying essays by Miguel Angel Corzo, Director of the Getty Conservation Institute, Lauren Greenfield, "Picture L.A.'s" Director of Photography, and Warren Olney, host of radio station KCRW's "Which Way, L.A.?", provide illuminating perspectives on the "Picture L.A." project.

The catalogue was among the books recently honored by the Association of American University Presses for meritorious achievement in design and production.

120 pages, 1034 x 81/2 inches

9 color plates, 75 black & white photographs

ISBN 0-89236-305-3, paperback, \$19.95



LUIS CASTRO

### GCI STAFF NEWS

Candice Pinchart, right, with Mme Françoise Cachin, Director of the Museums of France, at the Audiovisual Museographic Festival's award ceremony.



#### GCI Animated Video Wins Award

In November 1994 a Getty Conservation Institute video was given the pedagogy award at the Third Audiovisual Museographic Festival in France. The two-minute animated video, entitled "Have You Ever Considered What It's Like to Be a Work of Art?" was produced by Candice Pinchart while she was an intern in the GCI Director's Office during 1993-94.

The prize was given at the closing ceremony of the week-long festival, in which over 200 films, videos, and slide presentations from museums around the world were in competition. The international event, organized by the Direction des Musées de France, was held at the Musée National des Arts et Traditions Populaires in Paris.

On accepting the award, Ms. Pinchart, who studied arts communications in France and the United States, said that "videos can be used to great effect to present problems of conservation in a way that speaks directly to younger people."

Julian Zugazagoitia, the GCI 's representative at the event, thanked the festival organizers and on behalf of the GCI reiterated the Institute's firm commitment to using audiovisual materials such as video, CD-ROM, and virtual reality as a means of educating the general public regarding the importance of protecting the cultural heritage.

In Ms. Pinchart's witty animated video, a figure from a bas-relief in the Royal Palace in Abomey in Benin, West Africa, is exposed to harmful environmental elements, neglect, and vandalism and is saved from total destruction only by the arrival of a conservator.

Ms. Pinchart is currently studying wall paintings conservation at the Courtauld Institute of Art in London.

#### Neville Agnew Associate Director for Programs

Neville Agnew has been appointed Associate Director for Programs of the Getty Conservation Institute. He took up his new position on September 1, 1994.

Dr. Agnew joined the staff of the Institute in January 1988 as Scientific Program Deputy Director and became Program Director in June 1990. He served in this capacity until mid-1991, when he took over the Special Projects of the Institute.

In the role of Associate Director for Programs, Dr. Agnew will join with Rona Sebastian, Associate Director for Administration, in assisting the Director in the operations, planning, and development of the Institute. He also will be responsible for the supervision of projects of the Director's Office and the Publications unit of the Institute, including the newsletter.

Martha Demas will serve as Special Projects Acting Director while a search is undertaken for a permanent Director. Dr. Demas, whose background includes archaeology and historic preservation, has worked at the Institute since 1990. She began as a Fellow in the Training Program before moving to Special Projects, first as a Fellow and then as a Conservation Specialist.

0



#### Sandy Silver Manager of Office Services, Administration

Born to parents with a scientific bent (her father was a chemist, her mother a math teacher), Sandy Silver was raised in Torrance, California, and attended college at the University of California, Santa Barbara. After first studying speech pathology, she switched to communications and public speaking, graduating with a degree in communications studies. Following college, she worked at several different jobs in Los Angeles, including one in advertising and several at craft galleries. Later she was hired by the Armand Hammer Foundation to assist with the traveling exhibitions of the Hammer art collection. While there she did everything from public relations to installations to condition surveys of the art.

In 1988, after Mr. Hammer decided to build a permanent home for his collection, Ms. Silver went to work as Manager of Administration and Training in the internal audit department of Occidental Petroleum. Her goal remained working in an artsrelated organization, and when she learned through a job recruiter of an opportunity at the GCI, she eagerly pursued it. In January 1992 she was hired as Manager of Office Services for the Institute.

A self-described "task-oriented" person, she likes using her organizational skills for the variety of duties her position entails, which include, among other things, supervising the operations of the GCI facility, overseeing interior remodels, and coordinating safety procedures. She has particularly enjoyed one of her primary responsibilities which is serving as project manager for the Institute's scheduled move in mid-1996 to the new Getty Center, presently under construction. Recalling from her childhood her father's complaints about poorly designed laboratories, she is particularly intent on seeing to it that the labs in the GCI's future home function well.

The variety of people and activities at the Institute are part of what she finds gratifying in her work. She especially appreciates being part of an organization where so many people are working in a field they love.

Dusan Stulik

Acting Director, Scientific Program

From an early age, Dr. Dusan Stulik wanted both science and art to be part of his life. A native of Prague, he majored in chemistry at Charles University in Prague and studied painting and art history as well. After receiving a doctorate in physics from the Czechoslovak Academy of Sciences, he searched for a job in conservation research, but found none. For seven years he worked in the Czechoslovak nuclear energy industry, lecturing part-time at Charles University, while continuing on his own to study art history and conservation. In 1980, believing he had reached the limits of his career as the result of his declining to join the Communist Party, he left on a business trip to Scandanavia and did not return (he was not reunited with his family until four years later).

Dr. Stulik came to the United States, where he taught chemistry, first at the University of Utah, then at Washington State University. In 1983 he wrote to the GCI expressing interest in working at the Institute; five years later, he was ultimately hired as Head of the Analytical Section of the Scientific Program. He later became Deputy Director of the Program and in 1992 was made Acting Director.

Since coming to the Institute, he has been involved in a number of research areas, including binding media, environmental research, environmental monitoring, and adobe consolidation. He has been particularly involved in the application of radiocarbon dating and elemental analysis for use in conservation, and he finds it extremely satisfying to be using his knowledge of science and industrial techniques in the preservation of art.

It is necessary, he believes, to have a passion for art if one is going to work in conservation. But art is not his sole passion. Every couple of months he indulges in another of his loves - skydiving.





IN ACCORDANCE WITH THE GCI'S CONCERN FOR THE ENVIRONMENT THIS NEWSLETTER IS PRINTED ON RECYCLED PAPER





4503 Glencoe Avenue Marina del Rey California 90292–6537 Phone 310–822–2299 Fax 310–821–9409