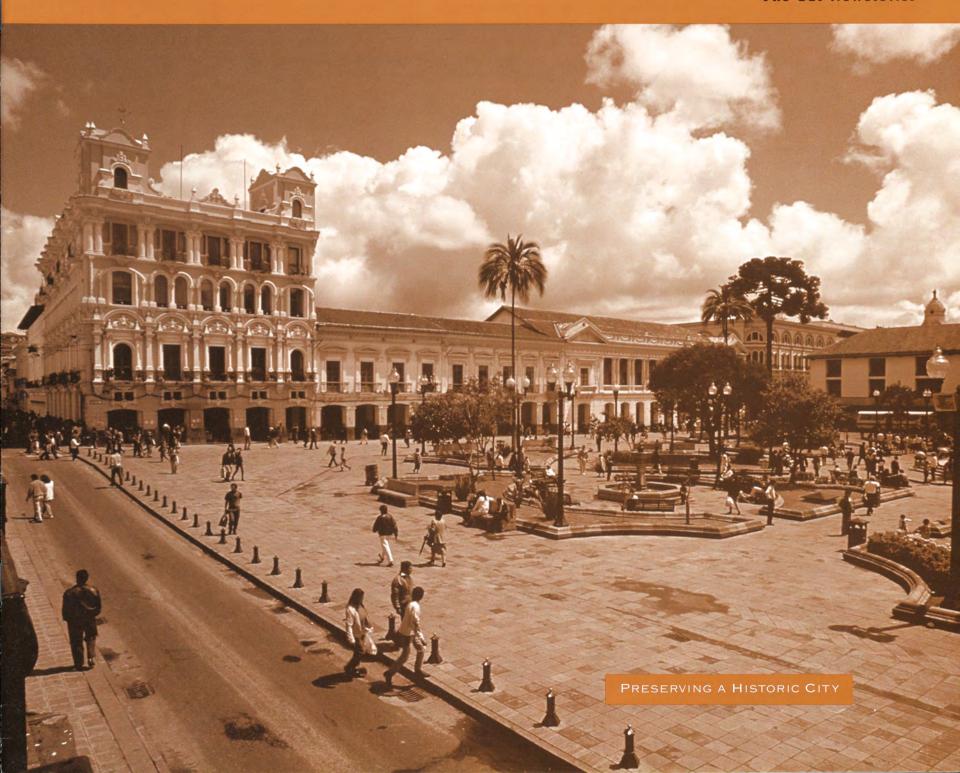
CONSERVATION

The GCI Newsletter



The Getty Conservation Institute

Newsletter

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Front cover: Plaza Grande, Quito, Ecuador. Photo: Guillermo Aldana. Back cover: Globe photo by Dennis Keeley.





[contents]

FEATURE

4 QUITO: PRESERVING A HISTORIC CITY

The colonial architecture of Ecuador's capital Quito matches in splendor its Andean setting, high on the slopes of Mt. Pichincha. But like many other historic cities, Quito's colonial center is engulfed by a larger, modern urban complex and subject to the stresses and strains of late 20th century life. Now, public and private efforts are underway to rescue this city's architectural wealth from decades of decline and restore its streets and structures to a measure of their past glory.

PROFILE

B THE CHALLENGES AHEAD FOR QUITO: "SOUTH AMERICA'S JEWEL"

Jamil Mahuad Witt, the mayor of Quito, Ecuador talks about his major goals for the city and the steps being taken to preserve Quito's historic city center.

NEWS IN CONSERVATION

10 DEALING WITH EARTHQUAKES: THE QUITO COLLOQUIUM

Among the main causes of damage to historic structures are natural disasters — and among the most serious of natural disasters are earthquakes. Throughout its 460 years, the city of Quito has sustained its share of earthquakes which have damaged many of its colonial buildings. With the objective of sharing information on seismic stabilization, the Getty Conservation Institute cosponsored in Quito an international colloquium on the "Seismic Protection of Historic Buildings and Monuments."

13 CAIRO CONFERENCE LEADS TO NEW FUNDS FOR CONSERVATION

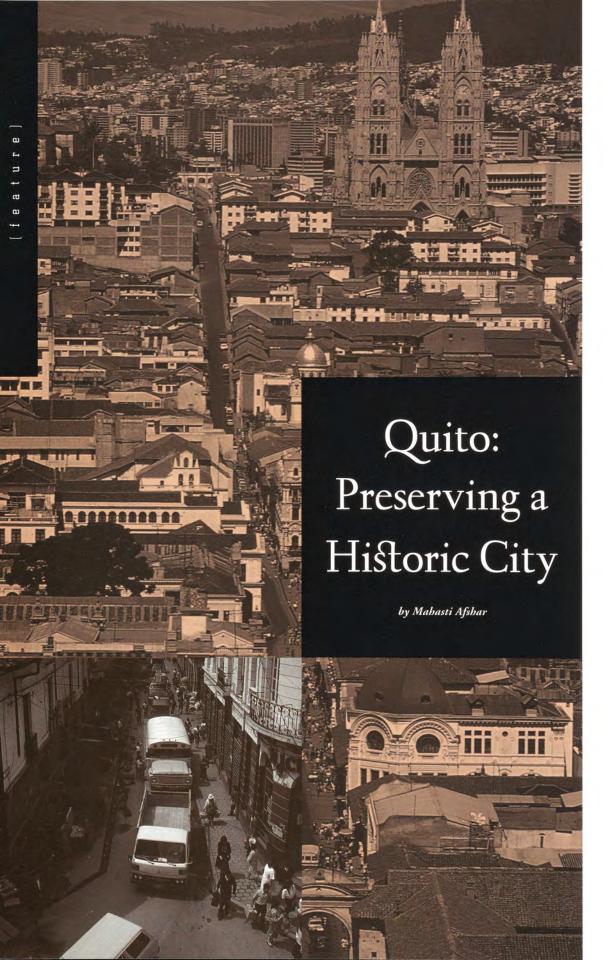
In response to Egypt's disastrous 1992 earthquake, an international conference was convened in Cairo to help direct conservation funding and technical support. Experts in conservation and seismology held technical discussions and surveyed damaged areas throughout Cairo's old city. In the wake of the conference, the American Research Center in Egypt has completed negotiations with the United States Agency for International Development to administer a \$15 million fund for the conservation of Egyptian monuments.

BCI NEWS

16 COURSES, EVENTS, AND PUBLICATIONS

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





Whistler said of music that it is the poetry of sound, and of painting that it is the poetry of sight. He might have added that sculpture is the poetry of space, and architecture, of sound and sight animating space. One wonders what he would have said of a historic city, an organism that is all of the above and pulsates with human life as well? A symphonic poem?

The metaphor would certainly apply to the historic center of Quito, capital of Ecuador, whose colonial architecture matches its splendid Andean setting 2,850 meters high on the slopes of Mt. Pichincha. Unfortunately, much of Quito's poetry is being silenced by the prosaic counterpoints of modern life.

Modern Quito

Comparing Quito's historic center today with the oldest preserved map of the city — drawn only thirty-one years after Quito's founding by the Spanish in 1534 — reveals that its basic plan remains intact. The evenly proportioned city blocks and narrow streets connected by well-placed plazas have not been modified in the least. Still, the center's character has degenerated, partly the result of natural causes, partly due to the impact of 20th century technology, but mostly because socioeconomic factors have reduced the level of maintenance and care it enjoyed in the past.

Rural immigrants without a cohesive social base now populate the historic core with dire effects on the physical fabric of residential buildings. Property owners have forsaken the area, subdividing and renting their historic buildings to tenants, most of whom have neither the interest, the means, nor the incentive to maintain them. Some buildings are used as warehouses, others are treated like dumpsites. A chaotic mass of cables, billboards, posters, and other miscellanies dangles from walls and balconies, concealing the beautiful, orderly 17th—19th century façades from view.

Although better tended, Quito's religious and civic monuments with their great collections of sculpture and paintings have also suffered damage. Poverty, population growth, pollution, earthquakes, an inadequate sanitation system, inordinate levels of human and vehicular traffic, and the superimposition of a fragmented and utilitarian outlook over the histori-

cally inspired, integral, and functional one have accelerated the decline.

Efforts to reverse this trend are underway and already bearing fruit. During the day, Plaza Grande is crowded with townsfolk who appreciate the newly paved and landscaped main square and take full advantage of its well-placed benches to while away time. An impeccable new dining complex on the corner serves meals, snacks, and drinks to a full house every day. At nightfall, with many of the center's buildings beautifully lit, petty criminals and prostitutes are beginning to give way to street performers and spectators. Tourism is on the rise, and pickpockets seem to be on the decline — at least in the historic heart of the city.

Since 1978 when UNESCO designated Quito's historic center a World Heritage Site, the Municipality of Quito has administered a number of independent conservation projects, several of them undertaken with Spain, Belgium, and other European countries. The rhythm of activities within the center has quickened, and is music to the ears of all of those involved in preserving and rehabilitating Quito's remarkable cultural patrimony.

Saving the Colonial City

As with most historic cities, Quito's small colonial core is engulfed by a larger, modern urban complex. To the north is a financial, residential, and shopping district, and to the south, an industrial area where workers also live. Most people who continue living in the core do so out of necessity, not choice. An exception is the mayor, Dr. Jamil Mahuad Witt, who after taking office in August 1992 moved into a historic building on the Plaza Grande "to set an example." As he walks across the square to his office, people stop him to say hello, ask a favor, or lodge a complaint. He never passes them by.

"I will do everything in my power to improve the people's quality of life, which goes hand in hand with improving the condition of the historic buildings," he says. "The revitalization of the center is a great and long-term challenge. But with proper planning, adequate financial and technical help, and some luck, I feel confident I can accomplish the work begun by my predecessor, Rodrigo Paz." Former Mayor Paz, known as El Negro to his friends, initiated the historic center's conservation activities while in office and remains involved in preservation efforts.

A primary problem is traffic which the Municipality is trying to control with new legislation. From dawn till dusk the city center is an overcrowded corridor for transporting goods and people from the south to the north. Leaded gasoline turns the place into a veritable gas chamber, affecting everyone and everything along its path.

Another challenge to the Municipality is devising feasible controls on street vending which is generally controlled by a local mafia with territories organized roughly in 100-meter-long blocks. To trade goods in certain locales is a long-established tradition here as in other Latin American cities. But in Quito street vending has been illegal since 1981. Nevertheless, country folk - mostly Indians who have settled in slums in the nearby hills - flock to the center before sunrise to trade a variety of cheap, manufactured goods until late in the day (while 80,000 people reside in the district, 200,000 people crowd its streets each day). They leave behind a lot of garbage which is infrequently collected. A recent effort to divert this form of commerce away from the center by building concrete stalls along the broad Avenida 24 Mayo has met with only limited success.

The Municipality plans adaptive reuse of buildings as hotels, restaurants, quality craft shops, theaters, and art galleries to encourage tourism. Most visitors to Ecuador view Quito as a post to pass on the way to the Galápagos Islands. Typically, they spend only a few hours visiting its historic center where they find little or no merchandise worth buying. It is hoped that new accommodations and services will produce revenues that can help revitalize the center's economic base and improve its physical fabric as well.

The mayor's office is also developing strategies to better communicate its mission to the public. Recently, a series of television programs were produced to generate local awareness and interest in historic preservation, and a variety of educational and advocacy activities are planned to encourage broader



Facing page: Overview of Quito's historic center, Photo: Guillermo Aldana. Inset: Traffic on García Moreno Street. Photo: Jesús Lopez. Above top: Historic photo of Plaza Grande. Rephotographed by: Guillermo Aldana. Below: Plaza Grande today. Photo: Guillermo Aldana.

community participation.

Other local institutions collaborate in the conservation program under the authority of the Municipality and its Planning Office — principally the Fondo de Salvamento, the Fundación Caspicara, and the Banco Central del Ecuador.

The Fondo de Salvamento was established after the disastrous 1987 earthquake which severely damaged numerous public and religious monuments. Headed by Dora Arízaga, the organization executes a variety of conservation and restoration projects approved by the Municipality. Its activities also include mitigating earthquake damage. "Difficult as it is to deal with earthquakes," says Ms. Arízaga as she wades through the multitudes and the merchandise along the narrow streets, "dealing with human problems is an even greater challenge. How do you accommodate people whose meager livelihood depends on the free use of street space, and at the same time create a sense of

Quito and Ecuador

Geography

Ecuador is divided into three regions: the coastal lowlands, the Andean mountain range, and the jungles of the upper Amazonian basin. Nestled on a plateau in the Andes, Quito, at 2,850 meters (9,300 feet), is the second highest capital in the world.

People

The official population of Ecuador in 1987 was 9,120,000. Of that, 40% are Indians, 40% mestizos, 10% white, and the remainder black or Asian; 49% of the population lives on the coast, 47% in the highlands. Quito is the second largest city at about one million.

Economy

In the 1970s, Ecuador went from an agricultural to a predominantly petroleum-based economy. Petroleum exports accounted for half the total by the 1980s although agriculture, including fishing, still employs a third of the labor force. Ecuador is the world's largest exporter of bananas, and shrimp farming has become a booming industry.

Early History

Quito's name is derived from the Quitus one of the original tribes to inhabit the area in the 11th century. Conquered by the Caras then the Shyries, invaders from the coast, the territory fell to the Inca ruler Huaina Capac toward the end of the 15th century. In 1531, the Spanish, led by Francisco Pizarro, landed in Peru, subsequently capturing and executing Atahualpa, Huaina Capac's heir. Sebastián de Benalcázar, one of Pizarro's lieutenants. took possession of Quito in 1534, though the settlement was razed to the ground by the Incas. On December 6, the town of San Francisco de Quito was established. The following year, construction of the city's first religious building began on the site of the present Cathedral.

responsibility against abusing it in the process? What is the key to preserving monuments without turning a living city into a museum, or worse, into an artificial imitation of itself?"

Another partner in conservation is the Fundación Caspicara, a private, non-profit organization founded in 1989 and operating under the direction of Germánico Salgado and his general manager Manuel Calisto. With extensive experience in financial management and economic planning, they network to solicit a variety of contributions worldwide. "We have banked on our freedom from political ties and pressures, and this has served our cause in the international arena to great advantage," says Mr. Salgado. He adds, "I must say that Ecuador's extended political stability has also helped." Manuel Calisto elaborates on the organization's mission: "We take our inspiration from Manuel 'Chili' Caspicara, an 18th century Indian sculptor who is one of the great prides of the famous Quito School of Art, and who inspired a creative, constructive, and fruitful dialogue through art between his native traditions and his acquired European craft." Presently housed with the Fondo de Salvamento in a restored building in the Plaza Grande, the Fundación Caspicara has been granted new quarters by the Municipality in a building which will house an arts and crafts gallery, as well as other cultural enterprises.

The García Moreno Project

The Getty Conservation Institute's activities in Quito began in 1990 with a conference on the conservation of historic centers co-sponsored with the Municipality and the United Nations Development Program. Since then it has collaborated with the Municipality and its affiliate organizations in a number of related conservation projects.

"Preserving the center's physical fabric is crucial to its socioeconomic revitalization," says Miguel Angel Corzo, Director of the Getty Conservation Institute. "This symbiosis will happen, provided local authorities develop lasting partnerships with a broad constituency of conservators, experts in urban development, entrepreneurs, property owners, and the general public. Our own partnership with the

Municipality, the Fondo de Salvamento, and the Fundación Caspicara has benefited from excellent political support and continues to enjoy exemplary human relations.

"We do not view our involvement in Quito as only a technical exercise in architectural conservation," he continues. "Rather, we see it as a contribution to improving the human condition in a place that in the past has contributed so much to enriching the human spirit. The very essence of an historic center is that it shows you where you come from and where you are going. For me, this is what's important about conservation."

Guided by this broad, humanistic vision of conservation, the Institute embarked on a project to stimulate the center's rehabilitation with a study of Calle García Moreno, a thoroughfare that reputedly connected the temples of the Sun and the Moon in the Inca period. Stretching along Plaza Grande — historically the center of cultural, religious, and festive activities, and to date the seat of government — the street was the main urban axis in colonial times. Buildings here combine traditional floor plans, including Andalucian patios, with massive adobe-type mud walls considered to be of native, Indian origin. The roofs are typically made of light wood structures covered with clay shingles and insulated from living areas by horizontal systems of canes or reeds.

"Calle García Moreno was an obvious choice for our project because of its abundance of outstanding colonial and post-colonial religious, civic, and residential buildings," says Dr. Neville Agnew, Special Projects Director for the Institute. "Now it is deteriorated, polluted, unsanitary, overcrowded, and overused. Reviving its grace and vigor requires a many-pronged effort on a scale that matches the vision of the city's founders."

The Institute's detailed 1992-93 study of García Moreno was supervised by Jaime Ortiz Lajous, a Getty Conservation Institute consultant from Mexico who has devoted his life to architectural conservation. Working with the Municipality, the Fondo de Salvamento, the Fundación Caspicara, the Banco Central del Ecuador, and ten local assistants whom he trained in the process, Ortiz Lajous produced a

remarkably comprehensive report which included fifty-seven photogrammetric maps of eight city blocks and covering about 60,000 sq. meters; pencil and ink drawings, damage registration, and detailed descriptions of architectural elements of twenty-seven buildings; the color history of about 17,000 sq. meters of façades; colored drawings reflecting historical color schemes applied since the early 19th century; stratigraphic color prospecting on a selected number of interiors as well as on all façades, some of which register up to six color strata beneath their currently white surfaces; graphic documentation of current exterior conditions including cables, signs, billboards, and other recent additions; and, finally, chemical analysis of painting materials. These data are complemented by nearly 500 color photographs.

Collectively, this information provides a basis for the rehabilitation of the remarkable buildings along García Moreno. Indeed, the purpose of the study,

Top: Sampling for color history on García Moreno Street.

Photo: Guillermo Aldana. Bottom: Testing of newspapers at
Library of La Merced. Photo: Jesús Lopez.





which the Institute will present to Mayor Mahuad early in 1994, is to provide building owners with a blue-print for restoring their structures. The study includes both technical specifications and cost estimates for rehabilitation. The intent is to return the buildings as much as possible to their earlier glory. To encourage owners to implement the design package, the Fundación Caspicara is working with the Banco Central del Ecuador, another key player in matters of cultural heritage, to provide low-interest, long-term loans.

During the Conservation Institute's study, team members established relationships with residents and property owners whose support from the start was recognized as a key to the project's success. The first acknowledgment came in July 1993 when Santiago Mantilla, owner of a commercial structure on the corner of García Moreno and Olmedo Streets, voluntarily spent funds to repaint his building, including its roof, ornamental elements, and signage, in accordance with the project's guidelines and the city authorities' decision to create a harmonic color scheme compatible with colors used during the eclectic-historic period in the 1870s.

Other Efforts

The Institute has pursued other activities to promote the rehabilitation and maintenance of Quito's cultural heritage, among them the production of a video documentary on the historic and artistic significance of the center and its conservation needs. In addition, in the spring of 1993 the Institute cosponsored an international colloquium on seismic stabilization — the first event of its kind in Quito (see *News In Conservation*, Page 10). This will be followed in mid-1994 by a training workshop on the same subject for architects and seismic engineers employed by the city and other official organizations.

The continued use of leaded gasoline in Ecuador has profound long-term consequences for public health and cultural property in Quito. Because the transition to unleaded gas remains a distant reality, traffic reduction is critically important. With this in mind, the Institute installed an environmental monitoring station adjacent to Calle García Moreno to

measure the center's climatic environment in order to better understand the dynamic relationship between meteorological conditions and the dissipation of pollution. The data will be used in designing a system to control vehicular traffic and reduce the damage caused by toxic fumes.

Several of the Institute's sister organizations in the Getty Trust are assisting in the conservation of two historic churches in Quito. The Getty Grant Program has awarded grants for the structural stabilization of the Church of La Merced which was last damaged in the 1987 earthquake. The Getty Center for the History of Art and the Humanities plans to train priests of the Library of La Merced in cataloguing its collection of rare books and early newspapers, as well as in collections management in order that public access to its holdings can be increased. The Getty Conservation Institute is providing conservation assistance to save library materials, with on-site work to be supervised by a local specialist in paper and book conservation. A few blocks away at the Jesuit church of La Compañía, Gordon Hanlon, an expert from the J. Paul Getty Museum, has advised conservators there on handling the deterioration problems of the church's interior polychromy and gilding, much of which resulted from structural damage due to earthquakes.

The main challenge in Quito is to collectively find approaches that respect the built environment without overlooking human needs, ones that bridge the gap between strictly purist and pragmatic conservation strategies. The Getty Conservation Institute and its partners in Quito are looking for solutions that best mediate the values of times past and present. Ultimately, the test of this collective response to history will be history itself.

Mahasti Afshar is Program Research Associate with the Getty Conservation Institute.

The Challenges Ahead for Quito: "South America's Jewel"

A conversation with Mayor Jamil Mahuad Witt

Jamil Mahuad Witt was born in Loja, a city in southern Ecuador. He received a doctorate in jurisprudence from the Catholic University of Quito, as well as a master's degree in public administration from Harvard University's Kennedy School of Government. He has been a professor at the Catholic University of Quito, and worked in Ecuadorian banking. He served two terms in Ecuador's Congress, was Minister of Labor and Human Resources, and has been President of the Popular Democratic Party. He became mayor of Quito in 1992.

Jane Slate Siena is Head of Institutional Relations for the Getty Conservation Institute and Managing Editor of Conservation, The GCI Newsletter.



Dr. Jamil Mahuad Witt, Mayor of Quito.

Photo: Jorge E. Sciupac.

Jane Slate Siena: Why did you want to become Mayor of Quito?

Mayor Jamil Mahuad Witt: This question requires a somewhat complex answer. First, I have spent much of my professional career searching for ways to help my country solve its most intractable problems. Like other Latin American countries, Ecuador continues to experience rapid urbanization. As a result, many of the problems of poverty and disenfranchisement are increasingly concentrated in its cities.

Second, although I was not born in Quito, I am one of its hundreds of thousands of adopted children. This has been my home since I came to study, and I have grown to love this city. Quito has both history and tradition as well as modern thriving business. There is breathtaking natural and architectural beauty. The people combine an inner strength and pride with a beautiful humility. For me, Quito is the jewel of South America.

Third, I enjoy public service. The work is not easy. In fact, I work harder than I ever did in the private sector. But the work is stimulating, exciting and, most importantly, significant. The people with whom I work are intelligent and committed. The issues which fill my calendar are the most interesting and diverse with which I have ever dealt. What are your major goals for the city?

I have various goals, but let me describe the four most important. As Quito has grown, transportation has become perhaps its number one problem. We have launched an ambitious program of public transportation that includes the development of a trolley bus system.

A second goal is to improve basic services. Rapid rural-to-urban migration creates constant pressures on all city functions, but we are acting vigorously to extend and improve potable water and sewerage services throughout Quito. This action represents our desire to spend the majority of our time and resources in helping the poorest segments of our city.

Another central goal is to conserve and revitalize the historical center of Quito, declared a World Heritage Site by UNESCO. We have focused much attention on this objective through the municipal government's Fondo de Salvamento which carries out rehabilitation projects on historical buildings and monuments.

A fourth goal is administrative reform. We are determined to achieve an honest, efficient, and productive city government.

What is your perspective concerning the role of cultural heritage in the revitalization of Ouito?

Any culture must find a way to maintain its own sense of identity in the midst of the mind-numbing amount of products and television programs which fill the modern world. If not, that culture is destined to lose the values which will prevent them from using their modern technology in unwise (or even evil) ways. We in Quito must base our goals and desires for the future in values derived from our history, heritage, and religion. An understanding of the cultural heritage provides the wisdom necessary to advance.

What practical steps are you taking to preserve the historic fabric of your city?

Preserving the historic fabric involves many tasks. Of course, the physical rehabilitation of the historical buildings is central to this work. Rehabilitation includes environmental protection and land-use planning, so as to protect the buildings from the damage that modern technologies can do.

Equally important, though, is raising the consciousness of citizens and tourists of the value of our past. Beautifully preserved buildings about which there is no knowledge or which are not placed in a cultural-historical context lose much of their value. Our Department of Education and Culture has many programs, including Quito's August Month of the Arts (to which all readers of this magazine are invited to come), as well as history and culture lessons for children.

The city government also supports traditional Andean music and artisanry. We are beginning to develop a new Museum of the History of Quito, which will include the pre-Conquest period of indigenous cultures as well as more modern history.

After eighteen months in office, what have you learned so far?

What have I *not* learned? This period has been the most learning-intensive experience in my life. As mayor of a large capital city, you must be an expert on finance, administration, culture, transportation, sewerage, drinking water, the environment, education, community development . . . this list could go on and on.

I have learned much about leadership in large organizations. There are differences in opinions and perspectives. The challenge is to find a way to hear and respect these differences, to encourage negotiation, but to make decisions and move forward.

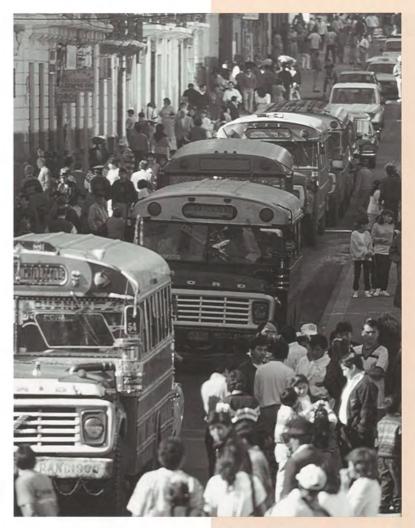
Your own love of the city is reflected in your decision to live in the historic city center. Have you succeeded in "setting an example?"

Yes. People are coming back to this beautiful part of the city. The vice-presidency has decided to move its offices to the historical center. The private sector is returning as businesses are once again investing. Private homes are being rehabilitated. Museums are being developed. Tourists are coming in ever-increasing numbers. We have begun the process.

What is your vision of what Quito will be like when you leave office in August 1996?

I hope to see a Quito in which the people are better served in terms of their basic necessities; in which the citizens feel both the history and the future of Quito; in which transportation functions well; in which the air and water in the city are clean; in which more tourists come to share with us the natural and architectural beauty of Quito; and in which investors see Quito as a city to place their resources. Such a Quito would be an even more beautiful place than it is today.

"An understanding OF THE CULTURAL HERITAGE PROVIDES THE WISDOM TO ADVANCE."

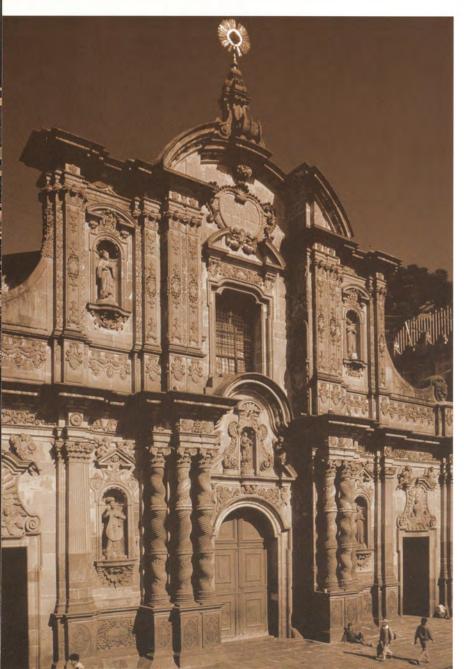


Crowds and traffic on García Moreno Street.

Photo: Guillermo Aldana.

Dealing with Earthquakes: The Quito Colloquium

by Jorge E. Sciupac, AIA



Among the main causes of damage to historic structures are natural disasters — and among the most serious of natural disasters are earthquakes. In the historic city center of Quito, Ecuador, evidence of their destructive power is not hard to find. Recognized by the United Nations as a "World Heritage Site," Quito has sustained more than its share of earthquakes during its 460 years of recorded history. The latest one in 1987 had a serious impact on many of the city's historic buildings, including churches and monuments.

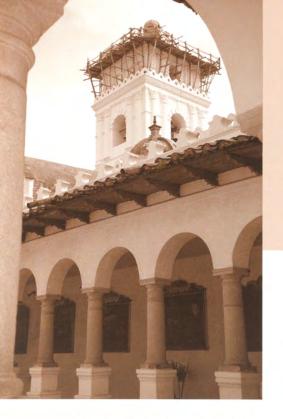
Prior to 1987 most of the conservation work done in Quito in the wake of earth-quakes focused on repairs and architectural restorations. After 1987 seismic stabilization efforts became more comprehensive and prevention oriented. By 1993 the authorities, experts, and institutions involved recognized the need to carefully evaluate existing work, correct mistakes, and explore alternative strategies.

With the objective of sharing information and experiences on seismic stabilization, the Getty Conservation Institute, the Municipality of Quito, the Fondo de Salvamento, and the Fundación Caspicara sponsored an international colloquium on the "Seismic Protection of Historic Buildings and Monuments." The colloquium, held May 31 through June 3, 1993, was officially opened by Dr. Jamil Mahuad Witt, Mayor of Quito, and the two presidents of the colloquium, Dora Arízaga, Director of the Fondo de Salvamento, and Neville Agnew, Special Projects Director of the Getty Conservation Institute.

"Earthquakes are unavoidable," said Mayor Mahuad in his opening remarks, "but we have to be accountable. What have we done to be prepared? What actions have we taken to prevent the consequences?"

Architects, engineers, and scientists from Ecuador and other earthquake-prone countries such as Mexico, Turkey, Macedonia, and the United States attended the colloquium. Presentations addressed a variety of issues, including: the relationship between natural disasters and conservation of cultural heritage; preventive actions; examples of consolidation, rehabilitation, and reinforcement of monuments in Mexico, California, and Quito; computerized and analytical methodologies; seismic strengthening analysis and techniques; differing approaches of architects and engineers; social and political pressures on conservation activities; and the ethics of structural interventions.

A vigorous debate during the colloquium centered on a plan for the structural restoration of La Compañía de Jesús. This church is one of Quito's most significant



Facing page: Façade
of La Compañía de Jesús.
Photo: Guillermo Aldana.
Left: Courtyard and bell
tower of La Merced.
Photo: Neville Agnew.
Right: Colloquium
participants examine
seismic damage. Photo:
Neville Agnew.

monuments, and its artistic, cultural, and historical value is widely recognized throughout the world. Because the plan for stabilization includes the use of exposed tensors (rigid steel cables that provide strengthening), there was much discussion regarding

this intervention's aesthetic, structural, historical, and ethical implications. Arguments were made for alternative technical solutions.

The discussion exposed some of the philosophical gaps between architecture and engineering on matters of conservation, in particular the difficulty of reconciling aesthetic and historical considerations with structural needs. Generally, conservation architects are more concerned with respecting the original aesthetic, material, and technology of buildings: minimum intervention is considered the best intervention. Some engineers, on the other hand, are more occupied with safety issues, and are interested in using modern techniques and materials to strengthen historic buildings, as long as the structures appear unchanged.

Another area of debate was the application of computer-based modeling for the design and calculation of structural stabilization of historic buildings. The issue was raised during a presentation describing the computer modeling used in the rehabilitation of the Mexico City Cathedral. The controversy in this case was not only about the practicality of such a sophisticated methodology (given the limited resources and expertise available for its use), but also its conceptual validity. The question raised was which approach was a better predictor of a building's behavior under seismic stress: a theoretical and individual examination of a building's parts, or observation of the building's behavior as an integrated whole? The answer to this question has significant implications in the type of seismic strengthening solutions proposed.

Participants agreed on the need for specialists in Quito to develop a scientific data base of seismic and geologic information, and also materials behavior. This multidisciplinary library should include studies, tests, methods, and most of all, statistical data of ground and structure behaviors. The available resources and local conditions are obviously of great value to the professional charged with proposing solutions for the protection of non-replaceable historical structures.

"Each problem needs a singular solution," stated Fernando Merino, President of the Ecuadorian Association of Structural Engineers, at the colloquium's conclusion. That being said, participants acknowledged in their final discussions that the quality of information exchange during the proceedings would help to guide them in the search for those singular solutions. By the end of the gathering the process of revising some of the proposals presented had already begun, and the institutions sponsoring the event were considering additional programs to further disseminate information on seismic stabilization methods. Indeed, in the following months, the Getty Conservation Institute's Training Program will offer a workshop on seismic issues.

Jorge E. Sciupac, AIA, a consultant to the Getty Conservation Institute, is an architect specializing in historic buildings and their seismic reinforcement.





CAIRO CONFERENCE LEADS TO NEW FUNDS FOR CONSERVATION

by Jane Slate Siena

Facing page: Cairo's historic quarter.

Photo: © Jake Rajs, The Image Bank.

The following institutions were represented at the Cairo Conference:

American Research Center in Egypt American University in Cairo **Assiut University** Cairo University Centre for Conservation and Preservation of Islamic Heritage **Egyptian Antiquities Organization** German Archaeological Institute in Egypt **Getty Conservation Institute** Italian Cultural Institute in Egypt Middle East Technical University in Ankara Polish Center of Archaeology in Cairo **Swiss Conservation Authority** UNESCO **United States Army Corps of Engineers United States Information Agency United States National Park Service** University of California, Los Angeles University of Michigan **University of Rome**

In response to Egypt's disastrous 1992 earthquake, an international conference was convened in Cairo to help direct funding and technical support to the conservation needs of Egyptian monuments.

The conference, which focused on restoration of Islamic monuments in Egypt, was held June 12–15, 1993 at the American University in Cairo. Organized by the American Research Center in Egypt (ARCE), the Getty Conservation Institute, and the Egyptian Antiquities Organization (EAO), the gathering was a response to the magnitude 5.9 earthquake that shook Cairo's Islamic quarter October 12, 1992. Experts in conservation and seismology met in Egypt's capital for technical discussions, and surveyed mosques and other historic structures in damaged areas throughout the old city.

The conference's objective was to assemble a consortium of expertise to assist the local and foreign governments in earthquake response efforts. The Honorable Robert Pelletreau, United States Ambassador to Egypt, attended the conference to emphasize the need for an integrated approach to the damaged district. Since the conference, ARCE has completed negotiations with the U.S. Agency for International Development to administer a \$15 million fund for the conservation of Egyptian monuments.

The Director of the Getty Conservation Institute, Miguel Angel Corzo, expressed satisfaction with the conference and its aftermath. "In light of our own collaborative efforts with the Egyptian government, we were pleased to join with ARCE and the EAO in organizing the Cairo Conference," he said. "We are, of course, gratified to see that this recent exchange of ideas has helped stimulate additional support for conserving Egypt's cultural heritage."

The conference was attended by over 200 participants who reviewed the earthquake recovery efforts undertaken by Egyptian and foreign teams, exchanged information about similar experiences elsewhere in the world, and developed recommendations for future work in Cairo's historic zone.

For centuries the Islamic quarter of the city has blended together the secular and

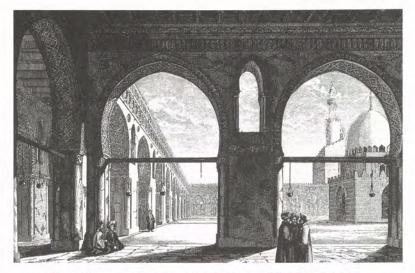
the spiritual. Within the quarter can be found not only great stone mosques, but also a labyrinth of narrow streets lined with shops and cafes where so many of Cairo's denizens have made their fortunes and their pleasures. Today this staggering sprawl of sand-colored structures remains a place where commerce is performed and prayers said. But its dignity and glory are sorely faded, beset not only by seismic

activity, but modern urban life.

In the conference's opening ceremony, Mark Easton, ARCE's Cairo Director, told the assembled participants that the October 1992 earthquake "brought a new urgency" to the conservation of Islamic monuments. He called for foreign institutions to "enter into a renewed dialogue with the appropriate Egyptian officials, a dialogue which distinguishes between the desirable and the possible," then to work toward doing "the possible."

During the three and a half day conference, technical papers were presented by experts in seismology, engineering, architecture, and conservation. Dr. Ahmed S. Ouf of the Department of Architecture in Cairo University's Faculty of Engineering proposed that restoration priorities be considered within a wider perspective than that of the urgency of the structural needs of each building. "Islamic monuments," he stated, "need to be restored according to their cultural value, their historic importance for their periods of construction, their possible current uses, as well as their location within the city."

Dr. James Wight of the University of Michigan reported that while the earthquake



Above: Nineteenth century illustration of the Mosque of Ebn Touloun in Cairo.

Below: The court of the Ebn Touloun Mosque.

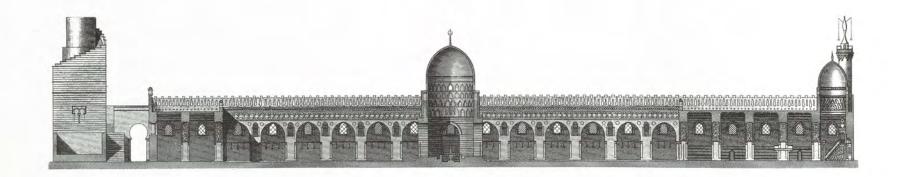
resulted in some "cracking in walls, arches, and domes" of some Islamic monuments, "the damage caused by the earthquake seems to have only added to a long and ongoing process that predates the earthquake. The primary reason for such damage is high ground water."

A number of other speakers also noted the destructive role of ground water, as well as other factors. Ms. Nairy Hampikian, an architect with the German

Archaeological Institute, stated that "in the last fifty years, the rising water table, the serious lack of maintenance, the new transportation means in the old city, and other newly introduced factors all accelerated the deterioration of the monuments which now all need special care." Dr. Mohamed Abd El-Hady of the Department of Conservation in Cairo University's Faculty of Archaeology observed that the high porosity of the limestone used in many of Cairo's historic structures is responsible for the high levels of water found in these structures' walls.

The Getty Conservation Institute will continue to participate in ARCE's efforts to support conservation work on monuments from all periods of Egyptian history. For additional information on the USAID funds, contact Mr. Mark Easton, Director, ARCE, 2 Midan Simon Bolivar, Garden City, Cairo, Egypt (phone 20-2 354-8239, fax 20-2 355-3052).

Jane Slate Siena is Head, Institutional Relations of the Getty Conservation Institute, and Managing Editor of Conservation, the GCI Newsletter.





RECENT COURSES



Conservation of Excavated Sites

During May 1993, the Getty Conservation Institute, in collaboration with the Department of Antiquities of Cyprus, conducted an eleven-day course on new approaches and techniques in the conservation of excavated sites. The aim of the course, held in Paphos, Cyprus, was to present a methodology that can be used for

developing conservation policies and practices to conserve excavated sites. Course topics included principles of site management, developing a management plan, conducting a condition survey, a review of preservation options, and techniques of site stabilization. During the course, participants visited several archaeological sites in the vicinity of Paphos.

The course was attended by nineteen participants from eleven countries — Israel, Poland, Tunisia, Chile, Cyprus, Slovenia, Greece, Zimbabwe, Jordan, Tanzania, and the United States. Participants included senior staff members of national departments of antiquities or archaeological services, conservation architects, and directors of large excavations. The principal instructors for the course were Neville Agnew, Martha Demas, and Margaret Mac Lean of the Conservation Institute, and John Stewart of the National Trust in London.

Two Training Activities in Belize

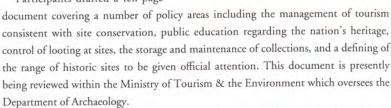
Xunantunich in west-central Belize is the site of a Maya residential and ceremonial center dating back to the 8th century AD. Since 1992, the Getty Conservation Institute has been providing technical advice and assistance to the Xunantunich Archaeological Project as part of the Institute's efforts to address the problems of conserving archaeological sites in humid, tropical environments. (The Institute's activities at the site will be covered in a future issue of *Conservation*).

In conjunction with its work at Xunantunich, the Conservation Institute conducted two training programs for Belize officials working with the country's cultural heritage.

In late June 1993, the Institute held a three day seminar on archaeological site management with the seven members of the Belize Department of Archaeology. The objective of the seminar was to review the Department's current policies and to assist in the drafting of a new policy statement. During the seminar, led by the Institute's Nicholas Stanley Price and Martha Demas, participants heard presentations from Augusto Molina-Montes, formerly director of Historic Monuments for the Instituto Nacional de Antropología e Historia de México; Angel Cabeza, an archaeologist with Chile's Corporación Nacional Forestal, and Richard Leventhal, director of UCLA's Institute of

Archaeology and of the excavations at Xunantunich. The group also heard from Belize's Permanent Secretary of Tourism & the Environment, Dr. Victor Gonzales.

Participants drafted a ten-page



During the last two weeks of July 1993, the Conservation Institute conducted a collections management workshop for staff members of the Belize Departments of Archaeology and Museums. Staff of the Archives Department also attended. The purpose of the workshop was to provide professionals in these Departments with information on methods and materials being used by other institutions in the managing of their collections.

The workshop's program included lectures on the general principles of conservation (particularly preventive conservation), discussions of disaster preparedness, pest management and collections care, and a review of procedures in the handling and storing of artifacts. The principal instructor for the workshop was Elizabeth Cornu, a conservator with the Fine Arts Museums of San Francisco. Valerie Dorge of the Institute's Training Program coordinated the workshop and assisted in instruction.



Pest Management and Control for Museums

The Getty Conservation Institute will offer a course on pest management April 11–15, 1994 at the Institute. The course is designed for conservators, collection managers, and other museum personnel responsible for overseeing pest management policies and activities, including eradication procedures, within their institutions. Course topics will include: Integrated Pest Management as part of an overall preventive conservation strategy; identification of insect pests and the damage they may cause; methods to prevent infestations; and, options for combating infestations.

Instructors for the course will be leading specialists in the areas of insect identification, Integrated Pest Management, and insect pest eradication by means of chemical fumigants, inert gases, and freezing. Instructors will include members of the Institute's Scientific Program and staff of the J. Paul Getty Museum, as well as personnel from other museums and research institutions.



RECENT EVENTS

Conference in St. Petersburg

A major international conference on the preservation of collections was held in St. Petersburg in June 1993. Organized by the Russian Academy of Sciences Library (BAN), the Russian National Library, and the Getty Conservation Institute, the two-day conference was attended by cultural leaders from throughout Russian and the Commonwealth of Independent States. In addition to a variety of presentations on new approaches to conservation by Russian and American experts, there was extensive discussion of a proposed regional center for preventive conservation in St. Petersburg. This would be the first such center in Russia.

The conference was addressed by directors of several of Russia's most important cultural institutions, including Director Igor Filippov of the Russian State Library in Moscow, and Deputy Director Vladimir Matveyev of the Hermitage Museum and Library. Among the other speakers were Miguel Angel Corzo, Director of the Getty Conservation Institute; Allan Hancock, Director of UNESCO'S Program for Central and Eastern European Development, and Peter Waters, Preservation Strategic Planning Officer for the U.S. Library of Congress. Also featured were sessions on scientific research in the museum environment and training in preventive conservation, presented by members of the Conservation Institute staff.

For over four years, the Institute has provided technical assistance to the Russian Academy of Sciences Library's preventive conservation program, the first of its kind in Russia, established in collaboration with the U.S. Library of Congress after the 1988 fire that devastated BAN's collections. BAN's preventive conservation program was showcased at the conference.



Above: The Hermitage Museum.

Photo: Steven Burr Williams, The Image Bank.



Lecture Series on Ancient Peru

In conjunction with the exhibition *Royal Tombs of Sipán* at UCLA's Fowler Museum of Cultural History, the Getty Conservation Institute presented a series of lectures in the fall of 1993 on the technologies of ancient Peru. Speakers and topics included: Professor Heather Lechtman, MIT, on the metallurgy of ancient Peru; William Conklin, architect, on ancient textiles of the Moche and the Huari; Professor Jean-Pierre Protzen, UC Berkeley, on ancient stonemasonry in the Andes; Dr. John Verano, Smithsonian Institution, on medicine and trephination in pre-Columbian Peru; and, Dr. Christopher Donnan, Fowler Museum, on the master potters of ancient Peru.

Sri Lanka Meeting

On July 28 and 29, 1993, a meeting organized by the Getty Conservation Institute was held in Colombo, Sri Lanka for cultural heritage professionals from the Asia-Pacific region. Attending the meeting were participants from a 1991 Hawaii conference on cultural policy cosponsored by the Institute. The objectives of the Colombo meeting were to strengthen the regional networks of people involved in protecting cultural heritage, to discuss in detail topics of interest to the participants, and to exchange information on developments since the Hawaii conference.

At the request of the participants, the subjects addressed during the meeting included the legal protection of cultural heritage; the impact of tourism and visitors; the mitigation of threats to cultural heritage; public education and advocacy; and, training. At the conclusion of the meeting, Institute representatives reiterated their commitment to the support of heritage networks in the Asia-Pacific region, and offered the Institute as a clearing house and disseminator of information for participants of the Colombo meeting and the Hawaii conference.



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PUBLICATIONS

Conservación Arqueológica In Situ

In the spring of 1986, Mexico's Instituto Nacional de Antropología e Historia (INAH) and the Getty Conservation Institute cosponsored a conference of international experts to review the state of in situ archaeological conservation. The following year, the papers presented at the conference, edited by Henry W. M. Hodges, were published by the Institute and INAH.

The Institute has now published a Spanish-language edition of the volume entitled Conservación Arqueológica In Situ. The book deals with issues of appropriate environmental intervention, problems posed by sites in developing countries, and the difficulty and necessity of collaboration between archaeologists and conservators. The conservation of materials found in archaeological settings — including adobe, wood, ceramics, textiles, wall paintings, and bone — is addressed by several contributors, as are techniques for evacuation and conservation through lifting, molding, and casting. In addition, case studies of the sites at the Templo Mayor, Teotihuacán, and Cacaxtla are presented.

GCI STAFF NEWS

The Documentation Program

In July 1993, Dr. Margaret Mac Lean was named the Director of the Getty Conservation Institute's Documentation Program. An anthropologist by training, with field experience in documentation expeditions for her own archaeological research in Latin America, Dr. Mac Lean came to the Institute from the position of Executive Director of the Center for Field Research in Cambridge, Massachusetts, associated with Earthwatch. To the Documentation Program's new mandate in field conservation as well as other activities, she brings her experience as a manager of non-profit scholarly and field activity, and an interest in site management and international policy that were further developed during her three years as Senior Coordinator in the Institute's Training Program.

Dr. Kathleen McDonnell, formerly Acting Director of the Program, will continue to serve in the newly defined role of Deputy Director, working closely with all levels of staff on broad program and policy issues, and utilizing her background in conservation information management in the activities of the Research and Applications section.

STAFF PROFILES

William S. Ginell

Head, Architecture and Monument Conservation Research, Scientific Program

Today, Bill Ginell's professional life is dedicated to preservation. But it began with a very different kind of endeavor. Following his 1943 graduation from the Polytechnic Institute of Brooklyn with a bachelor's degree in chemistry, he was part of the secret research team at Columbia University working to develop the atomic bomb.

After receiving his Ph.D. in physical chemistry from the University of Wisconsin, Dr. Ginell spent nine years at the Brookhaven National Laboratory on Long Island, New York, followed by twenty-six years working for aerospace firms in California. There his research ranged from energy conversion technologies and nuclear radiation effects on materials to developing the means to distinguish decoy nuclear missiles from real ones.

A chance visit by his wife and daughter-in-law to the J. Paul Getty Museum lead to a meeting with the Museum's antiquities conservation department and shortly thereafter a year of consulting on conservation issues. In 1984, Dr. Ginell joined the then embryonic Conservation Institute on a full-time basis, and helped design the laboratories at the Institute's Marina del Rey facility. During his first years with the Institute he worked on a variety of projects including researching the use of parylene as a protective coating for textiles, identifying minimally abrasive materials for removal of tarnish from silver, and developing a non-destructive method for determining sub-surface defects in stone.



As a materials scientist with lengthy experience in industry, Dr. Ginell sees his mandate at the Institute as facilitating the transfer of industrial techniques to conservation, and carefully evaluating their effectiveness. Because of the tremendous variation of materials used in the creation of art, he finds himself involved in a greater diversity of scientific issues than ever before in his career. At present his projects range from seismic studies of adobe and stone structures to helping determine an acceptable storage environment for the Dead Sea Scrolls.

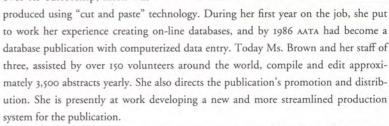
Jessica S. Brown

Managing Editor, AATA, Documentation Program

Born and raised in California, Jessica Brown attended college in her home state as well. She did, however, spend her junior year abroad, studying European history and refining her Italian language skills at the University of Padua. After graduating with a degree in history from the University of California, Santa Barbara, Ms. Brown was hired by ABC-Clio Information Services, a Santa Barbara—based publishing house. There she worked on *Historical Abstracts*, becoming managing editor of the publication in 1982.

Three years later she joined the Getty Conservation Institute, becoming the original member — and, for a brief time, the only member — of the Institute's Documentation Program. Since arriving at the Institute she has served as managing editor of *Art and Archaeology Abstracts* (AATA) which is published semi-annually in association with the International Institute for Conservation of Historic and Artistic Works.

When Ms. Brown first took over its editorship, AATA was



Her work on AATA has been gratifying not only because of her long-held interest in history, but also because of her working relationship with the twelve-member AATA Board of Editors, a diverse and energetic group from whose knowledge of conservation and organization she feels she has greatly benefited. A wordsmith professionally and personally, Ms. Brown is an avid Scrabble player who manages to complete the Los Angeles Times and New York Times crossword puzzles every day.

THE ENVIRONMENT THIS

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

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