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IN THE FIELD WITH AN EXTREME CONSERVATOR

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FEATURES

8 Adventures in Preservation
In the field with extreme conservator Kent Diebolt

12 Umbrian Frescos Reborn
The Renaissance murals of Pieve di San Brizio

18 Triumph at Trianon
The curtain rises on Marie-Antoinette's theater at Versailles after a major restoration

22 Ancient Maya Past in Peril
Defining the limits of acceptable change

24 Castles in the Sand
The mudbrick marvels of Yemen

30 Architect of Faith
The genius of Nicholas Hawksmoor

DEPARTMENTS

3 From the Editor

4 News

36 Expedition: China

ON THE COVER
A conservator examines the New Jersey State House dome. Photo by Jon Reis/www.jonreis.com

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From the Editor

For nearly four decades, the World Monuments Fund has been on the forefront of preservation, working to save sites around the globe. For every project we have undertaken, there are seemingly dozens of stories to be told, of lessons learned, of technologies developed, and of strategies devised to make sites economically self-sufficient and enhance the lives of those who live in their midst. We have launched ICON with the belief that, by sharing our experiences in the field, others will be encouraged to work to preserve the past for future generations. We invite you to join us as we explore the world's most treasured, yet endangered, sites and the cultures that created them.

As this issue went to press, WMF participated in an international symposium on the future of Afghanistan's cultural heritage, held in Kabul on the eve of the meeting of the Loya jirga, the multiethnic grand council charged with shaping that country's future. Many have asked, "After decades of war, is there truly anything left to preserve?" Having seen the country firsthand, the answer is a resounding "Yes." Afghanistan lies at one of the greatest cultural crossroads the world has known—evident in its abundant remains from the Greek, Buddhist, and Islamic periods. The conservation challenges that this war-torn nation faces are great, but not insurmountable. As we have learned, it is within the human spirit to prevail.

Angela M.H. Schuster
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BEYOND BAMIYAN: WILL THE WORLD BE READY NEXT TIME?

In March 2001, the preservation world stood speechless as the Taliban destroyed Afghanistan’s famous Buddhas of Bamiyan, hewn out of living rock more than 1,500 years ago. The eradication of the Buddhas was accompanied by the wholesale looting and destruction of the Kabul Museum. “How,” queried the media, “could preservationists let this happen?” At the time, those charged with overseeing humanity’s cultural heritage—in both the public and private sector—seemed to be at a loss for answers. Recently, however, a dialogue on this very issue began in the hopes that future “Bamiyans” can be averted.

On April 2, WMF hosted an informal meeting of representatives from UNESCO, the World Bank, the Asia Society, the U.S. State Department, and various agencies concerned with preservation. The meeting was held on the eve of a symposium at the Asia Society, cosponsored by WMF.

Among the issues raised at both meetings were the efficacy of the Hague Convention of 1954 and its amendments, UNESCO’s 1972 World Heritage Convention, as well as UNESCO’s ability, or lack thereof, to deal with crisis situations such as Bamiyan.

“The Hague Convention was drafted in the wake of World War II,” said Mounir Bouchenaki, UNESCO’s Assistant Director General for Culture. “It was written with an expectation that cultural heritage would be threatened by regular armies fighting conventional wars. As we have seen with Dubrovnik, Mostar, and Bamiyan, this is clearly no longer the case. These events were internally driven.” In 1999, Bouchenaki notes, revisions were made to the Hague Convention in an attempt to address this issue, but these have yet to be ratified. “As the wanton destruction so clearly illustrates,” said WMF President Bonnie Burnham, “current legislation is woefully inadequate in protecting cultural heritage in rogue nations.”

Beyond the issue of protecting sites at risk, the topic of rebuilding the Buddhas was also addressed. In the wake of the destruction, Paul Bucherer and a team from UNESCO, and the Swiss-based Afghanistan Institute, documented what was left of the statues, labeling their fallen fragments and covering them with tyvek to shield them from the region’s heavy winter snows. Bucherer, who has been active in the preservation of Afghanistan’s cultural heritage for more than three decades, is a leading proponent of reconstruction. “The desire to rebuild is not fueled by religious fervor; there are no Buddhists left in the region,” Bucherer told ICON. “Rather, the reconstruction of the Buddhas is seen as a critical step in the rebuilding of the region’s sense of place. Locals have told me, ‘We want our statues back. Only then will we know we are rid of the Taliban!’”

Although archaeologists and conservators wince at the idea of rebuilding the Buddhas, conservation work must be undertaken at the site to prevent further destruction. A series of lateral cracks—caused by wind and water erosion and reverberations from the Buddhas’ destruction—have developed within the niches. Left unattended, they will widen, destabilizing the cliff and causing the niches to collapse.

As this issue went to press, WMF was in Afghanistan as part of an international team invited to assess the state of the country’s surviving cultural heritage and what it will take to preserve it.
ENDANGERED MODERNIST MASTERPIECES FOCUS OF WMF EXHIBITION

Born of the political upheaval that engulfed war-torn Europe in the early decades of the twentieth century, the Modernist Movement was inspired by the development of new materials and technologies, and fueled by a desire for a utopian society. Proponents of Modernism eschewed the stylistic language of the past, replacing it with clean lines and sinuous forms. Architects such as Alvar Aalto, Mies van der Rohe, Richard Neutra, and Rudolf Schindler—whose work is represented in Modernism in Danger—revolutionized the way we live, work, and experience space.

Beyond its manifestation in the built environment, the Modernist Movement carried with it heady rhetoric—Ornament is crime. A machine for living. Less is more. Form follows function.—maxims that are now part of the architectural lexicon. The spirit of Modernist innovation lives on as architects today continue to explore new forms, materials, and technologies.

Less than a century after their design and construction, Modernist masterpieces—critical documents in the history of architecture—are being routinely demolished, disfigured, or abandoned. While World Monuments Fund has helped save important Modernist structures, others remain imperiled.

Among the endangered structures profiled in the exhibition is the A. Conger Goodyear House in Old Westbury, New York. Built by Edward Durell Stone in 1938, the house, which was included on WMF's 2002 list of the 100 Most Endangered Sites, was rescued from almost certain demolition at the hands of a developer in the fall of 2001. Also on view are a number of rare Russian architecture magazines from the 1920s and 1930s, as well as recent and period images by Julius Shulman and Ezra Stoller, the great architectural photographers of the Modernist Movement. The exhibition will be on view at the WMF Gallery, 95 Madison Ave., New York City, through September 21.

UNESCO AT 30—VENICE SETS THE STAGE

The Venetian island of San Giorgio Maggiore will be the setting for Shared Heritage, Common Responsibility, an international symposium held in honor of the 30th anniversary of UNESCO's World Heritage Convention. The Convention Concerning the Protection of the World Cultural and Natural Heritage was adopted by the General Conference of UNESCO at its seventeenth session in Paris on November 16, 1972. Ratified by 167 nations, the convention has become the most important international legal instrument for heritage protection. To date, 721 cultural and natural sites have been inscribed on the World Heritage List in recognition of their outstanding universal value.

Held November 14–16, 2002, the conference will focus on a wide range of issues, including the efficacy of the World Heritage Convention and the private sector's responsibility in safeguarding humankind's cultural and natural treasures. WMF will chair a session on private trusts.

LOOKING FOR THE PERFECT GIFT?
ADOPT A GARUDA!

Deep in the Cambodian jungle, at the ancient city of Angkor, 66 larger-than-life garudas—mythic bird-kings, vehicles of the Hindu god Vishnu—grace a perimeter wall that embraces the majestic temple of Preah Khan, built in 1191. Four larger garudas, each five-meters-high, stand guard at the temple corners. Exposed to the elements for nearly a millennium, the garudas are now in a fragile state of preservation, many breaking away from the walls. Others have already collapsed, their remains lying scattered on the ground. To conserve the statues that have already collapsed and to prevent others from meeting a similar fate, WMF established an Adopt-a-Garuda Program.

A donation of $25,000 underwrites the restoration of a life-size garuda; $50,000 for one of the enormous corner guards. Garuda sponsors will receive field reports and photos documenting the statue before and after conservation, and will be recognized with a bronze plaque bearing their name adjacent to the statue upon completion of the restoration. To date, nearly half of the surviving garudas have been adopted and restored. However, the rest are in urgent need. Interested sponsors should contact: lkahn@wmf.org.
MASTERING A VANISHING ART AT BROOKLYN'S STAINED GLASS CONSERVATION STUDIO

What do a rare suite of French Renaissance windows once owned by William Randolph Hearst, an endangered church in Brooklyn, and a collection of inner-city kids have in common? The answer is the Stained Glass Conservation Studio.

Headquartered in Dumbo, an area between the famed Brooklyn and Manhattan bridges now bustling with art galleries and ateliers, the Stained Glass Conservation Studio has become a premier training facility for the conservation of both American and European works in stained glass in the United States. More recently, it has become an incubator for the development of a revolutionary new high-school curriculum in preservation arts.

Developed by WMF, in conjunction with the New Jersey Institute of Technology; the Foundation Coubertin, a leading French craft training center; and the New York City Board of Education, the curriculum will provide students with the specialized skills needed for employment in the growing fields of restoration and conservation, and the background necessary for higher education in these areas.

The Stained Glass Conservation Studio was born nearly two decades ago out of a struggle to save one of New York's finest architectural treasures, the red sandstone Gothic Revival church of St. Ann & the Holy Trinity in Brooklyn, considered by many to be the crowning achievement of mid-nineteenth-century architect Minard Lefever. Part of the St. Ann Center for Restoration and the Arts, which was established to guide the church's restoration, the Stained Glass Conservation Studio was charged with the conservation of more than 7,000 square feet of stained glass windows by the artist William Jay Bolton.

In the spring of 2001, the Stained Glass Conservation Studio embarked on the painstaking restoration of a rare cycle of Renaissance windows purchased by William Randolph Hearst, sometime in the 1940s, to augment his massive collection of European decorative arts. In 1958, the Hearst family donated the windows to the St. David's School in New York, where they were installed in the boys' school chapel. The windows illustrate passages from the Golden Legend. Written in the thirteenth century, the book recounts in detail the lives of many of the saints, among them Mary Magdalene, who is credited with bringing Christianity to France.

Prior to Hearst's purchase, the windows had undergone several restorations, one of which involved cutting down the panels and reassembling them with inappropriately large leads, a process that obscured many fine details. Several small panels believed to be missing were also "replaced."

Working under the watchful eye of conservator David Fraser, students aiding in the restoration are taught the basics of a vanishing art. The first such program of its kind in the United States, it is now being field-tested at the Brooklyn High School of the Arts, a New York City magnet school, which accepted its first freshman class in the fall of 2000. The curriculum will serve as a model upon which a nationwide preservation arts program can be developed.

Following the completion of their restoration in June 2002, the windows will be preserved with a state-of-the-art isothermal protective glazing system and remounted in frames that will replicate their originals, as well as facilitate their future removal for conservation and maintenance.

Two panels from a suite of sixteenth-century stained glass windows depict John the Baptist blessing one of the windows' donors, left, and Mary Magdalene washing Christ's feet, right.
LE CORTON
APPELLATION CORTON CONTROLEE
GRAND CRU

CHEVALIER-MONTRACHET
APPELLATION CHEVALIER-MONTRACHET CONTROLEE
GRAND CRU

DOMAINE BOUCHARD PERE & FILS
MAISON FONDEE EN 1789

LE CORTON
APPELLATION CORTON CONTROLEE
GRAND CRU

CHEVALIER-MONTRACHET
APPELLATION CHEVALIER-MONTRACHET CONTROLEE
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The last pitch of the climb presents a number of technical problems. The holds are fragile and far apart; the incline, sheer vertical. The summit is well within reach, only a few careful moves away. This is no ordinary big-wall ascent, however. The peak in question is none other than Trinity Towers, just north of Trinity Church, a mere three blocks from Ground Zero. The Neo-Gothic edifice is one of Lower Manhattan's architectural gems and the current subject of a careful conservation and structural analysis. The collapse of the World Trade Center on September 11 rocked every building in the neighborhood to its very foundations and blanketed the area with pulverized gypsum and debris.
ST. THOMAS CHURCH, NEW YORK CITY

NEW JERSEY STATE HOUSE ROTUNDA, TRENTON

CHRYSLER BUILDING, NEW YORK CITY
Undertaking the survey is a team led by Kent Diebolt, founder of Vertical Access, a decade-old private firm specializing in building assessments in extreme locations.

“A British mountaineering friend from graduate school suggested I look to ropes as an ideal medium for getting around on buildings,” Diebolt told ICON. “Ropes are relatively inexpensive, nondestructive, and afford a level of control and maneuverability simply not available using far more costly scaffolding.” Using a range of techniques derived from rock climbing, search-and-rescue, and caving, Vertical Access has devised ingenious methods by which to move about on and within steeples, domes, and towers.

“The ropes are a means to an end,” says Diebolt. “We are actually in the business of information-gathering so that our clients can make informed decisions about conservation needs and project costs before construction documents are prepared. We use a variety of methods to gather the information, including photography and live-feed video. We also undertake annotated elevations in CAD format that are incorporated into databases.”

A contractor by training, Diebolt readily admits just how much he has learned from the architects and conservators he has worked with on projects such as the Chrysler Building in New York, the Chicago Tribune Building, and the state houses in Massachusetts, New Jersey, Kentucky, and West Virginia. Other “peaks” that have appeared on Diebolt’s extensive climbing resume include the High Gothic Harkness Tower at Yale University in New Haven, CT, Low Library at Columbia University; and the Jefferson Davis Monument in Fairview, KY.

In addition to Trinity Towers, Diebolt has undertaken a number of other building assessments in historic Lower Manhattan in the wake of the terrorist attack—among them the gargoyle terracotta facade of 55 Liberty Street—underwritten in part by the Lower Manhattan Emergency Preservation Fund. Established by WMF in cooperation with the National Trust for Historic Preservation, the Preservation League of New York State, the Municipal Art Society, and the New York Landmarks Conservancy, the Lower Manhattan Emergency Preservation Fund makes grants to stabilize, renovate, and restore damaged historic sites in Lower Manhattan. With more than 65 individual landmarks and six historic districts, the roughly 3.9-square-kilometer area of Lower Manhattan is one of our nation’s most important architectural zones. On October 11, 2001, the area was inscribed on WMF’s 2002 list of the 100 Most Endangered Sites in recognition of the buildings at risk after 9/11.—AMHS
Eight kilometers outside Spoleto, along the old road to Todi, lies the ancient Pieve di San Brizio, a diminutive parish church dedicated to a Syrian-Christian who took refuge in the city to avoid Roman persecution, sometime in the third century. San Brizio would later serve as the first bishop of Spoleto; many believe the pieve to have been built atop his oratory. Within the church is a rare suite of frescos—some of the finest known examples of Renaissance Umbrian painting—that only recently came to light during a restoration carried out in the wake of the 1997 earthquake.

Built on a basilica plan with three naves, the Pieve di San Brizio assumed its present form sometime in the mid-twelfth century. However, numerous Paleochristian elements were incorporated into the church, including two altar frontals, masonry blocks with Roman carvings—no doubt spoils from an ancient building—a fragment of an ancient cross embedded in the façade, and a sarcophagus found in the crypt, all of which date to the sixth century A.D.

Over time, a number of modifications were made to the sanctuary. The exterior of the pieve’s tripartite apse was fortified and incorporated into the town wall during the Guelf-Ghibelline struggles of the fourteenth century, which pitted supporters of the papacy against those of the Holy Roman Emperor. A 38-meter-tall campanile was added sometime in the fifteenth century. As in the church, Roman elements were incorporated into the bell tower, including a sarcophagus frontal thought to have some connection to the saint, which was embedded in its base. The graceful portal, or pietra caciolfa, was added in 1541; an inscription above it reads, Aediles
The interior of the church is simple, its columns made of exposed stone with plain capitals. The uppermost part of the church is believed to have been rebuilt after an earthquake in 1767, when an additional bay extended the presbytery. Terracotta pavement was laid throughout the nave in an intricate cosmatesque design sometime around 1541.

The 1997 earthquake proved a devastating blow to the pieve, which sustained extensive structural damage as well as damage to its interior finishes. Following the earthquake, emergency repairs were undertaken to stabilize the church. Work on the bell tower was completed in 1999; work on the pieve finished in 2000.

As conservators began cleaning and repairing the interior, they were delighted by what they saw. Beneath layers of damaged whitewash were the remains of a cycle of frescos, executed primarily in buon fresco, that had once graced much of the interior—the most splendid of which was a rendering of the Last Supper, painted by Jacopo Siculo in 1541.

Although some of the images had come to light in the late nineteenth century, these paintings were found in poor condition, heavily damaged by a brutal cleaning a century ago.

Realizing the value of the paintings, Don Ernesto Brognoli, San Brizio’s parish priest and the driving force behind the restoration of the pieve, contacted Rolando Ramaccini and Bruno Bruni, principals in a local firm, Cooperativa Beni Culturali Spoleto, which specializes in a host of conservation problems.

The church is notably humid due to rising damp. The layers of preparatory intonaco have separated from the masonry, and the final intonaco in turn has separated from its underlying support in many areas; the paint layer itself was not well adhered and displayed numerous losses due to flaking and mechanical damage to the pictorial surface. Apart from the images completely or partially obscured with repaint, the exposed paintings were covered with centuries of soot sealed under opaque calcium deposits. Ramaccini and Bruni would handle the conservation of the frescos, while art historian Bruno Toscano of the University of Rome, an expert in Umbrian painting, would attempt to identify the artists who painted the murals and determine the dates of their execution.

According to Toscano, a rendering of four archangels on the last cross vault on the right, which had been completely obscured by whitewash, is the earliest of the paintings in the pieve. Thought to be of an early-fifteenth-century date, the painting has been attributed to the Maestro di Eggi. Unfortunately, a large crack, quite possibly the result of an earthquake centuries ago, runs across the cross vault, marring three of the four figures. The azurite background, as usual, was applied a secco and has all but perished.

After the cleaning and various phases of consolidation of the support and paint layers, the missing intonaco was replaced by new material consisting of traditional lime and sand, with the addition of ground stone of the lower portion of this painting of San Sebastian, attributed to Bernardino Campilio and executed in buon fresco, had been severely damaged by rising damp, resulting in total paint loss. The upper portion, however, would have been in excellent condition had it not been for a harsh cleaning in the past. The luminosity of the image and the intensity of the green background have been enhanced by cleaning. Small areas of paint loss were filled in neutral tones.

The number by each fresco identifies its location on the site plan on the following page.
BUILT ON A BASILICA PLAN WITH THREE NAVES, THE PIEVE DI SAN BRIZIO ATTAINED ITS PRESENT FORM SOMETIME IN THE TWELFTH CENTURY. THE LOCATIONS OF THE RECENTLY RESTORED FRESCOS ARE NOTED ON THE DRAWING.

A 1541 RENDERING OF THE LAST SUPPER BY JACOPO SICULO, BELOW, GRACES THE ARCH LEADING INTO THE PRESBYTERY. THE UPPER PORTION OF THE COMPOSITION WAS DESTROYED WHEN THE CEILING WAS LOWERED, FOLLOWING THE EARTHQUAKE OF 1767. THE BIFORA, OR DOUBLE-ARCHED OPENING, NOW EXPOSED, ONCE HAD BEEN FILLED TO ACCOMMODATE SICULO'S PAINTING.

different particle size to simulate the texture of the original intonaco. Large areas of paint loss were filled slightly below the level of the original and integrated with watercolor. Smaller damaged areas were matched semi-mimetically with tratteggio.

The adjacent bay depicts the four evangelists. This, too, had been hidden under layers of whitewash and had sustained severe damage through the center of the cross vault sometime in antiquity. However, the painting is rather well preserved, with all four evangelists and their symbols legible. The painted frame, of a stamped, geometric design, differs from that on the cross vault bearing the four archangels. Toscano believes the paintings of the evangelists to have been done by a follower of the Maestro di Eggi, a few years after the archangels were painted. Yellow underdrawing on the intonaco, typical of the period, is still visible in some areas and the halos bear simple punching. Again, large areas of paint loss were filled slightly under the level of the original intonaco and retouching was carried out in watercolor.

On the left side of the presbytery, the paintings in the cross vaults are less well-preserved. A rendering of the four evangelists, of which only traces remain, including the head of an ox—the symbol of St. Luke—appears to be of the same period as its counterpart on the other side of the pieve—the pattern on the painted frame identical. Toscano believes it may have been damaged shortly after its execution and was “redone” on the other side of the sanctuary, which would explain why the evangelists appear twice. Since so little of the original remained, the new intonaco was brought up to the same level as the old and toned to match it in color.

Contemporary with the paintings in the cross vaults are frescos depicting St. Anthony, Abbob, and St. James, and an adjacent Madonna and Child Enthroned, also thought to be the work of the Maestro di Eggi. Located on the left wall of the nave, the two saints were originally full-length. It is thought that the fifteenth-century floor must have been lower to accommodate their full height. Modern decorative painting that covered part of
A figure of St. Paul, which graces the inside of the arch leading to the presbytery, is believed to be the work of Jacopo Siculo. The green background was executed in malachite, applied a secco.

The image was cleared and the surfaces cleaned. Under a large loss involving the lower part of the figure of St. James, a layer of original plaster was found and retained. The retouching was done with neutral tones. Although the Madonna and Child is badly damaged, the quality of painting is exceptional.

An image of San Brizio on the right wall of the nave may have been done by the same follower of Maestro di Eggi responsible for the four evangelists. Along the lower left edge, signs of an adjacent fresco are visible. Again, previous scraping of the overpaint has damaged the painting, and the azurite background, applied a secco, is worn. The frame, the cloth of honor, and the saints' robes are quite well preserved. A scarcely legible inscription along the bottom reads, "hoc opus fecit f. MCCCCXXX..." The surface was cleaned of encrusted dirt and the remains of old whitewash. Only small fills were necessary. A minimal amount of mimetic restoration was done on the head to establish the structure of the beard and collar. Other abrasions were toned with neutral colors.

Within the church are a number of works believed to be by Bernardino Campilio, an accomplished local artist working in a modern tradition. Among these are a rendering of the Madonna and Child Enthroned on the right wall of the nave. The fresco is well preserved, although abraded in places due to harsh cleaning. The azurite used for the mantle has mostly flaked off, revealing gray underpainting. The yellow ochre preparation of the halo remains, although the metal foil no longer exists. The integration was done mainly with neutral tones, although the large loss to the right side of the frame was imitated in order not to disturb the composition. The fine state of preservation, the quality, and its position make a strong impression.

On the adjacent wall, another image of the Madonna and Child Enthroned with St. Anthony, Abbot, and St. John, dated 1478, appears to have been executed by the same artist, as the frames and style of painting are nearly identical. Prior to the restoration, most of the fresco was still covered with whitewash; drips of dirt and soot that had run down the wall attested the extreme damp of the structure and the damage it has provoked. Three giornate are visible, one for each figure, while a fourth one was used for the well-preserved dedication and date at the base. The inscription identifying St. John appears to have been added later, a secco, since it runs over a join. Most of the azurite has gone, leaving the grayish preparation. The halos are deeply inscribed and traces of the original gilded tin leaf remain. Oddly, the halo of the child is applied over the painted passage and is therefore not punched, but only painted and leafed. The painting is not as well preserved as its companion, having suffered from abrasion, especially the child. A wide crack runs diagonally across the left-hand part. Fortunately, all the heads survive. The large fill is toned intonaco. A piece of original plaster below the painting was left, while more recent repairs were removed, exposing the masonry wall.

To the right of the Madonna and Child Enthroned with St. Anthony, Abbot, and St. John is a depiction of St. Sebastian that appears to be part of the same suite of murals authored by Campilio. Executed in buon fresco, the lower half of the image is completely missing.

A fragmentary image of a seated Madonna and Child, attributed to the
circle of Bernardino Campilio, had also been previously exposed on the masonry column to the left of the stairs leading to the presbytery. Overpaint had been roughly scraped off in the past, leaving numerous abrasions on the upper portion of the fresco. The halo, which is punched, had been covered with gilded tin, traces of which remain. The painting was cleaned, remaining overpaint and an old repair removed. The loss in the center was filled with an intonaco, toned and textured to match the original, which is exposed in the lower part of the dress. Abrasions were toned with neutral colors.

Several paintings of slightly later date, due to overlapping intonaco, appear to be the work of Jacopo Zambolino, including a second image of St. Sebastian. The lower part has suffered from the early scraping and mainly from rising damp, which is still a problem in the church. Some passages were covered with whitewash and were recovered during the cleaning, mainly the legs of the saint. Small losses were filled and the retouching done with neutral tones. In the lower part of the paintings along this wall, fills were toned rather than glazed with watercolors, which would be affected by the damp.

Also attributed to this artist is an adjacent painting of San Brizio with a Martyr. It appears to have been done on two applications of intonaco, the joins visible in the decorative border. The straight lines were snapped. Apart from the large loss to the lower right section of the martyr saint, it is in excellent condition with vivid colors. The punched halos originally had laminated foil. The losses consist of local, mechanically caused damages, filled where necessary, and retouched with neutral tones. The patch of plaster filling the loss in the lower right corner was removed and a decision was made, based on the position of the loss, to leave the masonry exposed.

AMONG THE EARLIEST WORKS IN THE PIEVE DI SAN BRIZIO—SHOWN BEFORE AND AFTER RESTORATION—IS A POORLY PRESERVED PAINTING OF THE MADONNA AND CHILD. BELIEVED TO BE OF MID-FIFTEENTHCENTURY DATE, BOTH HAVE BEEN ATTRIBUTED TO THE MAESTRO DI EGGI.
Perhaps the finest painting in the pieve is that of the Last Supper, rendered by Jacopo Siculo in 1541. The fresco had been partially uncovered in the past. A double-arched opening, or bifora, part of the original church plan and now exposed, had been filled in to accommodate Siculo’s composition. The background scenery in the painting, perhaps depicting a loggia or window, was lost when the ceiling of the entire structure was lowered, following the 1767 earthquake. Removal of layers of whitewash revealed many details of the composition, including the elaborately patterned floor and flanking columns, and much of the two lovely sibyls. To our surprise, tromp l’oeil marble and grape vines, and a tondo bearing the monogram of Christ, also came to light on the arch itself.

A full-length figure of St. Paul, also by Jacopo Siculo, was visible inside the arch on the right before the restoration. It is in true fresco and had survived in good condition, except for scrapes left by an inexpert cleaner in the past. It simply needed a careful cleaning to remove centuries of soot and conservative retouching with neutral tones to emphasize the well-rendered folds of his red mantle. His head, hands, and feet were well preserved. The green background and dress, probably in malachite applied a secco, were, however, considerably worn. An image of St. Peter, of which only a portion of the head has survived, graces the opposite side of the arch and is believed to be by Siculo as well.

Together, these paintings constitute a glorious corpus of previously unknown Umbrian works. That they were brought back to life is due in large part to a WMF grant, underwritten by the Kapiolani and Filippo Marignoli Fund.

—Dianne Modestini
Considered one of the most beautiful historic theaters in Europe, le Théâtre de la Reine at Versailles was built between 1778 and 1779 by the architect Richard Mique at the request of Marie-Antoinette. A pupil of Christoph Willibald von Gluck in Vienna, Marie-Antoinette was fond of music, opera, and the theater, commissioning works from the poet Michel-Jean Sedaine and comic-opera composer André Grétry. In addition to the many command performances held in her private theater, plays were put on in which the queen herself took part.

Appointed in rich, Louis XVI style, the diminutive theater is part of the Petit Trianon Estate, which is dominated by a small mansion built between 1762 and 1768 by Ange-Jacques Gabriel for Louis XV and Madame de Pompadour. Given to Marie-Antoinette by Louis XVI, le Petit Trianon soon became the queen's favorite residence. She expanded the estate, adding the Anglo-Chinese Gardens and Le Hameau (the Hamlet), a model farm, mill, and dairy, where she and her fellow court companions could pretend they were peasants. In time the suite of buildings would become inextricably linked with the events of the French Revolution. The queen was at Trianon in October 1789, when she was informed that an angry crowd from Paris was approaching the palace gates.

Triumph at Trianon

THE CURTAIN RISES ON MARIE-ANTOINETTE'S THEATER AT VERSAILLES AFTER A MAJOR RESTORATION
During the seventeenth and eighteenth centuries, private theaters were a common feature in palaces and chateaux. Madame de Pompadour had commissioned Gabriel to build a theater for her private retreat of Choisy, while Louis XV ordered the same architect to undertake the magnificent Court Theater at Versailles.

In contrast to the latter, Marie-Antoinette's theater at Trianon was intended to welcome a small, intimate crowd. The "parterre"—the central seating area—is surrounded by the "baignoires," the lower box seats, separated by a grand balustrade. There is only one balcony and a single royal box. With the exception of a few furnishings dispersed in 1794, the major-

RESTORED TO ITS EIGHTEENTH-CENTURY SPLENDOR, MARIE-ANTOINETTE'S THEATER HAD BEEN GILDED IN VARIOUS SHADES OF GREEN AND YELLOW. THE PAINTED OVAL, WHICH GRACES THE THEATER'S CEILING, IS THE WORK OF THE BAROQUE MASTER LOUIS JACQUES DURAMEAU.
A rendering detailing the theater’s construction, above, was included in a book of watercolors by the eighteenth-century artist Claude-Louis Châtelet, now in the collection of a library in Modena, Italy. The theater was built primarily of wood—evident during restoration—which contributed to its extraordinary acoustics.

The magnificent interior was constructed primarily of wood for acoustic reasons and decorated with “carton pate,” similar to papier-mâché, which had been gilded with gold leaf in several shades of green and yellow, and painted in places to look like marble. In addition to the decorative elements, the stage machinery, considered state-of-the-art by eighteenth-century standards, had survived along with a number of original sets, among them a 1754 set commissioned by Madame de Pompadour for Fontainebleau. Designed by the Slotz Brothers, it may be one of the oldest sets in the world.

During the 1930s, the theater underwent a major restoration, funded in large part by a Rockefeller grant to Versailles. Although this work saved the theater from total collapse, a number of inappropriate repairs had been undertaken, including the application of faux “gilding,” which over the past seven decades had turned a dark brown, and the replacement of original fabric panels with wallpaper. By the late 1990s, the theater’s ceiling had once again begun to collapse. The balcony was closed, being too fragile to support visitors.

In 1997, WMF France entered into an agreement with Hubert Astier, president of the Versailles Museum, to raise the $700,000 necessary to properly restore the theater and supervise the work through its completion.

A French team, working under the direction of Pierre-André Lablaude, architect-en-chef of Versailles, under-
took a magnificent job following in the footsteps of their eighteenth-century predecessors. Guided by archival documents detailing the construction of the theater and the composition of its original finishes, the team was able to stabilize structural elements and properly restore the theater's interior.

Reconstruction of the theater's ceiling was among the most demanding aspects of the restoration. Its beams had shifted out of place, destabilizing the structure and damaging a magnificent painting by the Baroque master Louis Jacques Durameau, which graces an oval at its center. The balcony suffered from similar structural destabilization. The royal box, which had been entirely destroyed, had to be rebuilt. Mique's original design, however, had been recorded by the painter Claude-Louis Châtelet in a book of watercolors that Marie-Antoinette had given to her brother, the Archduke of Modena-Este, and which is currently in the holdings of a library in Modena, Italy.

The original color scheme, including the many shades of gilt and royal blue, was replicated. Although the abundance of gold might seem overwhelming, by candlelight, it is a magical atmosphere, light dancing off the many glistening surfaces.

The well-known, Lyons-based Prelle company, which has been in business since the eighteenth century, was able to re-create the original fabric used in the theater, a blue fleuret damask woven of linen and silk. The only modern additions were the installation of proper electrical and security systems.

Following its restoration, the theater will be used only for intimate gatherings. To have opened it up to the public on a regular basis would have required the installation of numerous "safety features," including emergency exits and lighting, which would have destroyed the integrity of its interior.

The work, which took several years to plan and just over a year to complete, was made possible through the generosity of WMF France and its many donors, including Constantin Goulandris, The Florence Gould Foundation, and the Conny Maeva Foundation. Non-U.S. donations were matched by funds provided through WMF's Robert W. Wilson Challenge Program.

In October 2001, Marie-Antoinette's theater was unveiled to the public, restored to its late-eighteenth-century grandeur. For the first time in nearly two centuries, the music of Mozart and Gluck echoed within its walls. WMF France has made the restoration of eighteenth-century monuments a priority in its mission, the inauguration of the Queen's Theatre a magnificent way to launch this campaign.

—Bertrand du Vignaud
Ancient Maya Past in Peril
DEFINING THE LIMITS OF ACCEPTABLE CHANGE

There is no word for “tourism” in Chol, a Prehispanic language still spoken by more than 10,000 Maya living along the southern reaches of the Usumacinta River, which separates Guatemala and the Mexican state of Chiapas. Yet, due to a recent surge in interest in the development of two vast, ancient Maya cities—Yaxchilán and Piedras Negras—the need to come to terms with tourism and the encroachment of the modern world has become of vital importance. How such changes will impact this region must be addressed if this fragile landscape is to be preserved for future generations.

Settled in the early years of the first millennium A.D., Yaxchilán and Piedras Negras rose to preeminence on the banks of the Usumacinta in the sixth and seventh centuries A.D., reaching their apogee in the mid-eighth century when most of the structures we see today—temples, pyramids, and ballcourts—were constructed.

In antiquity, the Usumacinta served as a vast commercial highway for dugout canoes laden with exotic goods. The sites prospered from, and often competed for, control of the lucrative riverine trade in salt and kakaw (cocoa); cotton for clothing; obsidian for knife blades; and jade, feathers, and shells to make jewelry and royal headdresses.

In addition to their splendid architectural features, the sites have played a key role in Maya studies, yielding abundant inscriptions—among the longest in the Maya world—that have provided key clues in the decipherment of a complex writing system. Today, an estimated 60 percent of the ancient Maya glyphs can be read.

Since their construction more than 1,200 years ago, however, time has taken its toll on the two sites. Both have suffered from exposure to the elements, exuberant vegetation, and the predations of looters. Piedras Negras, in particular, has suffered more recent structural deterioration and destabilization due to poor excavation techniques employed in the early decades of the twentieth century. Though the sites had suffered from the ravages of time, until recently, their remoteness had protected them from the hoards of visitors who frequent better-known Maya sites such as Chichén Itza in Yucatán and Tikal in the Petén region of Guatemala. But this may soon change.
The field of preservation has undergone a dramatic transformation in recent years. No longer are conservators concerned simply with repairing a monument or great work of art; they now examine the entire context in which a cultural treasure exists. For the Maya sites in question—Yaxchilán and Piedras Negras—this context includes a vast and complex ecological system that embraces the sites as well as the needs of indigenous peoples who live in their shadows.

LAC is a method by which site development decisions can be made. In short, it is a recipe for evaluating various types of site exploitation and deciding what is acceptable and what is not. How much wood, for instance, can be extracted from a forest, yet leave it capable of replenishing itself? The same question can be asked with regard to a cultural resource. How many visitors can a site accommodate before it becomes an eroding asset?

Using an enhanced form of LAC that also takes into account more recent thinking on environmental management, MacFarland and Wurz outlined various scenarios for site development and management. They highlighted the advantages and disadvantages of each scenario based on their own, firsthand experience with park development around the globe.

More than 30 representatives of the preservation community participated in the workshop, along with some 60 local Chol and Lacandón. The latter, from Lacanhá and Bonampak, traveled several hours each day to attend the sessions. In addition to listening to a series of presentations, participants were invited to break up into working groups to address specific conservation and development issues. Presented with a variety of sites and site problems, they were asked to determine such things as how many visitors could the sites handle at a given time without further damaging archaeological remains? What toll would such visitation exact on local resources—water, food, rainforests, and wildlife? What sort of infrastructure would be needed to increase the capacity to accommodate visitors, yet leave the environment surrounding each site relatively unscathed?

Such group discussions gave rise to thoughtful and animated discussions about the best way to "have it all," to reap rewards with the smallest possible cost to the environment.

"No one has ever asked us what we thought about development, planning, and conservation," said Manuel Gómez, a Chol community leader in Frontera Corozal. "When will you come back to teach us some more? We know we do not have the tools necessary to care for our sites."

WMF has agreed to sponsor a conservation training program for guards at Yaxchilán and Piedras Negras, as well as those from Bonampak; Bonampak—known for its exquisite suite of mid-eighteenth-century murals—has recently been opened up for tourism. Historically, it was a six-hour horseback ride into the site. Today, there is a site museum, nature trail, and tram to take visitors to the site.

Beyond these measures, WMF hopes to undertake a series of interventions, engaging locals in the conservation process. However, there are no educational offerings beyond the sixth grade in Frontera Corozal—those seeking higher education must travel to Palenque, two hours away, or to Tuxtla, the state capital.

While historically, providing higher education has not been part of the mission of the World Monuments Fund, increasing the level of educational attainment is critical if project directors are to look to the local population to participate in site preservation. Those engaging in conservation must have a firm grounding in the sciences.

The workshop was a beginning. WMF hopes the seeds take root and lead to the development of a long-term strategy for the preservation of two of the Maya world's most important sites.

—AMHS
Skiiting the edge of the Empty Quarter, sheer cliffs of sandstone and limestone rise 1,000 feet above the valley floor of Yemen's Wadi Hadhramaut, flanking a series of settlements that lie along an ancient road. Three of these cities—Shibam, Seyoun, and Tarim—are renown throughout the Arab world for their exotic and sophisticated architecture, executed entirely of mudbrick.

In antiquity, the Hadhramaut Valley, 100 miles inland from the Indian Ocean, served as an important thoroughfare for the spice route, which stretched from Arabia to Europe. To this day, land in the valley floor is used for cultivation; settlements are constructed high on the escarpments. In addition to providing a modicum of defense—until recently, tribal warfare was prevalent in the valley—the structures are protected from flash floods, which race through the valley during the fall monsoon season.

Built atop an ancient tell, the walled city of Shibam has been called the "Manhattan of the desert" because of its densely packed mudbrick tower houses, some ten stories high. Though Shibam is rich in history, the town we see today dates primarily to the early sixteenth century. A UNESCO World Heritage City, Shibam is the best known of the mudbrick cities.

The city of Seyoun, the regional capital of the Valley, is dominated by the Kathiri sultan's palace, an enormous, seven-story edifice, quite possi-
bly the largest mudbrick building in the world. The palace, which now houses the Museum of the Hadhramaut and the offices of the Department of Antiquities, is one of the few in Seyoun to have survived in its original form. Although older neighborhoods in the city are still intact, Seyoun is the most compromised in terms of the introduction of concrete structures, with nearly 1,000 such buildings constructed in the valley since 1992. Among the city's newer buildings, however, are some interesting examples of contemporary architecture such as the regional airport, built in the 1960s using hybrid technology. Here, concrete beams and columns were infilled with traditional mudbrick construction and decoration.

Tarim, which serves as the religious center of the valley, is the least known of the Hadrami cities. Its most impressive building is a 50-meter-tall, unreinforced mudbrick minaret. The city boasts a number of palaces that were built between the 1870s and 1930s by merchant families who made their wealth abroad. The palaces exhibit an unusual interpretation of foreign styles—Baroque, Rococo, Neoclassicism, Mogul, and Early Modernism. This cross-cultural fertilization is all the more interesting because the basic typology of plan and spatial relationships suited to the local climate and culture remains in the design of these buildings. In addition to the structures themselves, Tarim is famed for its highly developed lime craftsmanship, applied to mudbrick buildings as waterproofing and decoration.

Despite its uniqueness, Tarim has historically been overlooked by international agencies funding heritage conservation in favor of the better known cities of Shibam and Seyoun. In 1972, under a Marxist regime, the palaces were expropriated and reused as public housing and schools. In the decades that followed, little maintenance was performed to these buildings. With the unification of Yemen in 1992, the palaces began to be returned to their rightful owners. However, as many of the original families who owned the palaces now live abroad, a number of the palaces have yet to be reclaimed. With a construction material as ephemeral as mudbrick, lack of maintenance can quickly translate into substantial deterioration.

Because of their architectural value and neglected state, the mudbrick palaces of Tarim were included on the World Monuments Fund’s 1998, 2000, and 2002 lists of the 100 Most Endangered Sites. In 1999, a study generously funded by the Samuel H. Kress Foundation, was undertaken to assess the condition of 27 historic buildings and determine the feasibility of their restoration.

Of these, four of the buildings are deteriorated beyond repair. The house of Abd Al-Rahman bin Sheykh Al-Kaf has severe structural damage and has been abandoned because the multiple heirs cannot come to agreement about repairing it. One building, the Qasr Al-Quba, has been adaptively reused as a hotel, and another, Al-Ranad, the former Kathiri sultan’s palace in Tarim, is now used as a police station. The Asmarah and the Haddad are undergoing restoration funded by their owners. The Aydid continues to function as a school and is in good repair.

Some of the buildings were never abandoned. Al-Tawahi and the Khamiran are two examples of houses that were continuously occupied.
The Hadhrami method of mudbrick construction has changed little over the millennia. Soil is mixed with straw and water, and patted into a wooden frame. Once filled, the frame is lifted up and placed adjacent to the newly poured bricks, and filled again. The bricks are left to dry in the sun for a week. Thousands of bricks will be needed for a family home.

Construction proceeds with the laying of a stone foundation, approximately one meter high. Mudbricks are set in a running bond with mud mortar, joints made roughly the same thickness as the mudbricks. As the walls rise, they are plastered with mud. Wood is used for lintels and joists. The height and size of rooms within a building are dictated by the length of the wood available, so often decorative wood columns are installed as intermediate supports. Floors and roofs are constructed of mud. Highly ornate wood doors and windows grace the exterior.

As construction is undertaken only during the winter, it may take several years to build a multistoried house. Once a building is completed, the most vulnerable areas—roofs, setback terraces, and parapets—are plastered in lime. If the owners are wealthy, the whole of the exterior will be lime-plastered and decorated with designs executed in oil-based paint. Interiors receive a combination of lime-washed mud plaster and lime plaster. The living spaces, corridors, and bathrooms typically receive a wainscot of malas, a labor-intensive, burnished lime plaster. Kitchens are finished in mud plaster because of the use of open fires, and are generally located partially outdoors.

Lime plaster is made in an age-old way. Limestone is collected from a dry river bed, stacked in a honeycomb fashion within a mudbrick kiln, and burned for 24 hours. Once it has cooled, the calcined limestone is cleaned, weighed, and placed on a slaking bed. Water is poured over the calcined limestone, causing it to crumble. The slaked lime is then placed in vats of water, where it is trampled by workers wearing protective boots. Lime beaters line the paved road and spend eight hours a day beating the lumps to make a lime putty.
by their owners and well-maintained as a result. On the other hand, some of the
most interesting palaces are in a precarious state of maintenance, but with timel­
yly intervention could survive. The feasibility study identified four of these which
will form the core of the approach to revitalizing Tarim’s historic center.

The plan for saving the Tarimi palaces rests on the establishment of a docu­
mentation training program that will bring together graduate students from
Columbia University’s historic preservation program and art history department,
alongside architecture students from the University of Mukallah in Yemen.
Through examination of the architecture departments’ curriculum at both the
universities of Sana’a and Mukallah, it became apparent that there is no emphasis
on historic preservation. This is a serious flaw for a country rich in cultural patrimony and possessing some of the most intact ensembles of Arabic architecture in
the Middle East. Through documentation of the Tarimi palaces, local architecture
students will be exposed to the importance of their cultural heritage. At the same
time, pilot restoration and adaptive reuse of some of the buildings will demon­
strate the efficacy of recycling these structures while engaging the town in a dia­
logue of recognition for the local craftsmen and heritage management for cultur­
al tourism.

To date, two structures have been selected for preliminary intervention. The
Ishshah, which was originally the palace of Umar bin Sheykh Al-Kaf, is in fair-to-
poor condition with substantial moisture-related damage. The surviving interior
contains some of the best examples of malas, a decorative form of burnished lime
plaster. Markedly Indo-European in style, the mansion currently functions as a
house museum. This is the only private home open to the public in the
Hadhramaut Valley. The leasee recently acquired a long-term lease for the entire
house and plans to open the remaining portions to the public. The condition of
the building is still salvageable, however, in 1999, a bathroom wing was lost, and
the traditional kitchen is in imminent danger of collapse.

Across the street is another Indo-European-style palace, Al-Munaysurah, one
of the bin Yahyah family mansions. One of the earliest surviving palaces, it dates
to 1757. It is in good-to-fair condition, but has extensive termite damage and
shows some signs of settlement. Al-Munaysurah is an occupied, two-family
home. The absentee owners, however, have agreed to enter into a long-term
lease with a Sana’ani tourism company to provide an upscale bed and breakfast
inn for Tarim. The interiors are highly ornate and lend themselves to this type of
adaptive reuse.

Funding is being sought from several sources to pay for the restoration of
these two buildings, but is by no means secured. The Dutch Technical Aid pro­
gram has been approached for both buildings, whereas the Ishshah is under con­
sideration for a Rolex Award, as well as funding from Canada Nexen, who, with
gas concerns in the region, is considering donating funds for the upgrade of the
three regional museums, including the Museum of the Hadhramaut and the
Mukallah Museum. For the documentation training program, funds have already
been secured from the Samuel H. Kress Foundation and the American Institute
for Yemeni Studies.

Once work has been completed on the Ishshah and Al-Munaysurah, two
more buildings have been identified for restoration and adaptive reuse. The Dar
al Salam is being considered for reuse as the Center for Mudbrick Architecture
and is in good-to-fair condition. Its impressive early-Modernist facade with
rounded balconies is quite unusual. Another Indo-European palace, the Hamtut,
is under review for reuse as the home of the Manuscript Library, a rare resource
for which Tarim is well known. The Hamtut is in fair-to-poor condition, although
spectacular interiors still survive.

All four buildings selected for the initial pilot restoration are in close proxim­
ity to each other and many of the remaining palaces. It is hoped that by instigat­
ing restoration, the government will pursue a policy of establishing a historic dis­
trict, and the remaining palace owners will be galvanized into saving their
traditional family homes.

—Pamela Jerome
A quest to build Jerusalem in England's green and pleasant land began nearly a century before William Blake composed his poem; for Queen Anne, in her 1711 Act of Parliamentary, decreed that "...50 new churches [were to be built] of stone and other proper materials, with Towers or Steeples to each of them." The churches would be needed to serve London's growing population; they would also offer an opportunity to secure an Anglican presence amid increasing numbers of Catholics and Dissenters.

The Parliamentary Act, passed by a then recently reinstated Tory government, imposed a duty on coal to pay for the new churches, a cogent and visible collaboration between the state and church.

Of the 50 churches commissioned by the queen, only a dozen were ever built, six by Nicholas Hawksmoor (1661-1736), a protege of Sir Christopher Wren, considered by many to have been England's finest Baroque architect.

Hawksmoor has frequently been overshadowed by the glory of his great master Sir Christopher Wren (1632-1723), and by his friend and contemporary Sir John Vanbrugh (1664-1726). All three men were masters of the English Baroque style, which came to fruition during the transitional period between the seventeenth and eighteenth centuries—it is a tempered version of the flamboyant and highly decorative Baroque found on the continent. It has some of the reticence of the English character, which resisted the powerful continental messages of the Counter-Reformation. Despite the influence of the two great architects, Hawksmoor's work is highly individual and discernibly different. In contrast to Wren's graceful lines and Vanbrugh's flamboyance, the classical language of Hawksmoor's oeuvre is muscular and bold, almost cyclopean in its massiveness.

Although Hawksmoor never went abroad to study the remains of Classical antiquity like many of his contemporaries, he was nevertheless fascinated by the monuments of the ancient Mediterranean world, referencing them in many of his works. With their massive bulk, soaring height, and dramatic use of light and shade, Hawksmoor's six London churches provide a distinctive punctuation to the architectural landscape on both sides of the Thames.

St. Alfege (1712-1714) in Greenwich was the first of the churches to be built under the 1711 Act of Parliamentary. As shown in the plan, there is a central space and two axes, the longer running from east to west with the cross axis marked, in this case by two transepts. All these features are characteristics of Hawksmoor's other churches, setting the tone for the other five. The ceiling is flat and the auxiliary spaces are richly decorated, as at other Hawksmoor churches. The tower was finished by John James in 1730 and is insignificant compared to the rest of the mighty composition. The exterior is smooth with round-headed windows that contrast with the heavy, keystoned square ones. The portico at the east end is plain yet majestic, with its Doric columns and Roman arch that breaks through the pediment. The interior was gutted by bombing during the Second World War, but restored by 1953, when it was rededicated.

Christ Church, Spitalfields (1714-1729) suffered in the late nineteenth century from alterations made by the Victorian architect Ewan Christian, as well as from neglect and the threat of inappropriate reuse schemes during recent decades. A current restoration scheme aims to return the church back to its sumptuous, pre-1850 classical interior. A central space with a flat ceiling is flanked by aisles roofed with elliptical barrel vaults, carried on a
I will not cease from mental flight,
Nor shall the sword sleep in my hand,
Till we have built Jerusalem
In England's green and pleasant land.

Milton
William Blake (1757–1827)
WITH ITS TWO TOWERS, ST. GEORGE'S IN THE EAST, IN WAPPING, EAST LONDON, OFFERS ONE OF THE CITY'S FINEST BAROQUE FACADES.

LITTLE IS LEFT OF THE BUILDING'S ORIGINAL INTERIOR, HOWEVER. TODAY, IT IS A SHELL HOUSING AN ENTIRELY NEW CHURCH STRUCTURE.

The interior is punctuated with plain, bold, and massive elements, including round clerestory windows positioned by Hawksmoor to create a dramatic play of light and shade. A Tuscan porch with a semicircular pediment is attached to the west end, and with the tower and spire immediately behind it, the whole composition is quite overwhelming for any viewer. At the east end, there is a Venetian window. This may indicate the growing popularity of the Palladians, or it might simply be echoing the arched pediment of the entrance portico.

St. George's in the East (1714–1729), in Wapping, East London, is now a shell housing a completely new church structure. As at St. Anne's, Limehouse, and Christ Church, Spitalfields, it has two right-angled axes. The cross axis is marked with stair towers set towards the corners rather than the transepts, as at St. Alfege. The whole composition with its two towers, the horizontal box of the nave, and the wide principal tower, creates one of the finest English Baroque compositions.

St. Anne's, Limehouse, built from 1714–1730, is not as elemental in its external composition as St. George's in the East. It was gutted by fire in 1850, but painstakingly restored from 1851 to 1854 by John Morris. It is based on a four-column plan with east and west transepts. But like St. George's in the East, the tower is Gothic in spirit. As at all of the six churches, the ceiling is flat and the emphasis is on the cross axis.

St. Mary's, Woolnoth, in the city of London, was built from 1716–1727, and is unlike any of the other five Hawksmoor churches. It differs in plan, being based on a square, and in its elements, with the external rustication and decorated blind niches of the south side being more Mannerist than Baroque or Antique. Unlike Hawksmoor's other churches, the tower at St. Mary's is very broad, occupying almost the full width of the west front.

Hailed as Hawksmoor's greatest London church, St. George's, Bloomsbury (1716–1731) was built just a stone's throw away from what are now the British Museum, the Paul Mellon Centre for Studies in British Art, and Russell Square, where a number of the University of London buildings are clustered. Despite its reorientation in the late eighteenth century, the interior of St. George's still belongs to Hawksmoor in its classical grandeur.
its characteristically flat ceiling, and even in its fabric, which is thought to date largely from the original 1716 design. The impressive Corinthian portico on the south elevation of St. George’s vividly recalls Imperial Rome and makes it the grandest of all the Hawksmoor churches. This was the first time this feature had been used in a London church and at none of the other five churches does he use the Corinthian order. The tower also differentiates St. George’s from the other five churches. It is centrally placed on the west side and is square rather than rectangular, continuing right down to the ground. It is often considered to be the most whimsical of all Hawksmoor’s church towers, with its stepped spire, statue of George I, and its blatant reference to the Mausoleum of Halicarnassus. There were originally two crowned unicorns and two crowned lions placed on the sides of the spire, but they no longer exist. The north elevation is punctuated with a two-story arcade, positioned over the massive keystones of the crypt windows.

Since their construction in the eighteenth century, Hawksmoor’s churches have suffered greatly. The heavy hand of Victorian architects, the ravages of war, and the new development of the past decades have all contributed to the demise of their physical fabric and distinctive character. They form the bulk of Hawksmoor’s oeuvre—along with the West Towers of Westminster Abbey—and demonstrate the qualities that make him the most significant of English Baroque architects, making their neglect even harder to fathom.

St. George’s, Bloomsbury, is listed by English Heritage as a Grade I Listed Building, the highest recognition a British building can be granted, yet the church has mysteriously slipped through England’s heritage safety net. No major repair work has been undertaken since 1871, and in its current state of
decay, the restoration and conservation of the church have been estimated at around $8.25 million.

The area surrounding St. George's has had a chequered history, which has undoubtedly contributed to the decline of the church. The gin epidemic of the 1740s, which was famously alluded to in William Hogarth's engraving, Gin Lane, was replaced by a drug explosion in the 1990s. The area has also been transformed into a commercial district and has hosted an influx of recent immigrants. A proposed redevelopment in the 1960s and 1970s, which would have destroyed most of the British Museum-Bloomsbury neighborhood around the church, also delayed major conservation works, as it was believed the church would benefit from this at a later date. Fortunately for the neighborhood, the project was shelved, but St. George's continued to decline. The church had found a new life in the 1960s as the University Chaplaincy, but when that institution relocated, it left a small and struggling congregation. Over the years, lack of funds and maintenance caused the drainage system to fail, leading to water infiltration and damage to the interior. The only restoration undertaken in recent years was between 1974 and 1976, when the interior of the church was repainted to a then-fashionable color scheme, and the roof structure reinforced. The low morale then pervading the area immediately surrounding St. George's seemed to be echoed in its blackened elevations.

Concerned over the plight of this neglected masterpiece, WMF in Britain began talking with the conservation architect Colin Kerr; the church's treasurer Julian Sharpe; and the current and active rector, the Revd. Perry Butler, about a possible restoration. Given the importance of the building and its poor condition, St. George's, Bloomsbury, was included on WMF's 2002 list of the 100 Most Endangered Sites. As a result of the listing, the church's future is much more rosy.

WMF has been given a generous gift of $5 million from the Estate of Paul Mellon to help with the restoration of this fine Hawksmoor church, provided the work is completed within three years. Once cleaned, this fine elevation, currently blackened with soot, will be appreciated fully and will greatly enhance the street it faces. WMF in Britain is committed to helping the church raise a further $3.25 million for the restoration of the interior.

Today, a new priest in charge has begun to attract a congregation of young and lively professional people. On St. George's Day 2002, he was made rector—a clear vote of confidence by the diocese with regard to the church's future. The church is a growing force of stability in a community in transition, directing its funds towards the community outreach programs and offering the parish a valuable arts venue. Through its commitment to the restoration and conservation of St. George's, Bloomsbury, WMF in Britain will not only be significantly contribu-
ing to the future of a Hawksmoor masterpiece and a national landmark of international renown, but also to the regeneration of the area immediately surrounding the church.

Prior to its involvement with St. George's, WMF in Britain had supported the restoration of Christ Church, Spitalfields, an almost archaeological restoration scheme initiated in the late 1970s, which aimed to be the first accurate restoration of a Hawksmoor building. The project is still in progress, more than 20 years later. All involved with the St. George's project are committed to ensuring progress is made swiftly, particularly with the three-year condition placed on the gift of $5 million from the Estate of Paul Mellon. It is hoped that St. George's, Bloomsbury will become a model conservation and restoration project.

The project is currently in the planning stages. Colin Kerr has recently completed a report on the history and development of the church, and its current condition. Following the completion of the survey at the beginning of April, a design scheme will be produced based on the requirements of the church and the repair work required to secure the fabric of the building. A visual examination of the building has shown that extensive stone repairs are required. The external fabric of the church will be cleaned before individual masonry repairs and joint repairs can be carried out. Work to the exterior is due to commence in the Spring of 2003, with the interior restoration starting later in the year and running right through to the end of 2004. A permanent exhibition on Hawksmoor is planned for the crypt, and a program of lectures on Baroque architecture will be given at the Paul Mellon Centre.

—Colin Amery
There are stretches of the Wild Wall—those sections of the Great Wall of China that have resisted the encroachment of the modern world—where one cannot help but see this most ancient of monuments as one of the grandest pieces of environmental art. It brings to mind the modern works of Richard Serra or Andrew Goldsworthy, only magnified a thousandfold—the Wall majestically rising from the very terrain from which it was made.

The Wall is so integrated into the Chinese landscape that structure and context are one.

WMF Vice President of Programs John Stubbs, our technical consultants, Chinese colleagues, and I had just finished a week-long planning session on the restoration of Emperor Qianlong's opulent, yet long neglected, eighteenth-century Lodge of Retirement in the Forbidden City. Although we were physically exhausted and had flights back to the U.S. the following morning, we could not resist the draw of an eleventh-hour visit to the Wall.

We were in the company of William Lindesay, an advocate for the Wall, who spearheads the effort to protect it from exploitation and uncontrolled tourism. It was Lindesay who nominated the Wall to WMF's 2002 list of the 100 Most Endangered Sites. He has probably walked more of the Wall than any other Westerner. His knowledge of the Wall—from antiquity to the present—is encyclopedic; his passion borders on fervor. It was an exhilarating two-and-a-half-hour hike, treading on part monument, part ruin, fueled by the moment, and tempered by the challenge of ensuring a respectful future for one of humanity's great achievements.

—Henry Tzu Ng
From majestic Khmer temples cloaked in jungle to the glorious works of the Italian Renaissance, visit some of the world's greatest cultural treasures and witness their rebirth through careful conservation.

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**UPCOMING DEPARTURES**

**GLORIES OF BYZANTIUM**
with John Julius, Viscount Norwich, and WMF in Britain
October 1–6, 2002

**LEGENDARY ANGKOR**
January 12–19, February 2–9, or February 16–23, 2003

**WONDERS OF ANCIENT CHINA**
WMF Trustee and International Council Trip*
May 18–30, 2003

**CELEBRATE ST. PETERSBURG'S TRICENTENNIAL**
with WMF in Britain
June 4–9, 2003

**COLONIAL MEXICO**
with WMF in Britain
March 1–14, 2003

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