



**CONSERVATION
PERSPECTIVES**
THE GCI NEWSLETTER

SPRING 2023

**CONSERVING MODERN
ARCHITECTURE**

Getty
Conservation
Institute

A Note from the Director



Photo: Anna Flavin, GCI.

In 2012 the Getty Conservation Institute commenced its Conserving Modern Architecture Initiative (CMAI) in an effort to advance conservation of twentieth-century built heritage. We launched the initiative in recognition of the aging of important works of the Modern Movement and of the need to grapple with conservation challenges presented by the innovative construction methods and materials that typify modernism, as well as to address the new methodological and philosophical issues they raise. Since it began, CMAI has sought to meet its goals through research, model field projects, training and education, publications, and public programming. The initiative has been, and remains, a major undertaking of the Institute.

We thought this an appropriate moment to revisit in *Conservation Perspectives* the topic of modern architecture conservation in order to reflect not only on our work in recent years, but also on how the field itself has evolved during that time.

In her feature article, Susan Macdonald, head of Buildings and Sites at the GCI, examines the changes that have occurred as a result of the growing interest in modern heritage and also the continuing conservation challenges this heritage confronts. In addition, she discusses the increasing recognition of the diverse ways modernism has manifested itself around the world, prompting a redefining of modern heritage conceptually and a reassessment of its values. In their article on CMAI itself, Chandler McCoy and Gail Ostergren of the GCI describe the activities of the initiative's first ten years, delineating how it has worked to tackle the conservation

needs of modern heritage in terms of research into materials and through field projects, published resources, and education. Susan, Chandler, and Gail also worked with *Conservation Perspectives* editor Jeffrey Levin as guest coeditors of this edition.

Amel Chabbi and Yasmeen Al Rashdi of the Department of Culture and Tourism of Abu Dhabi discuss in their article the particular challenges in the Arab world to the conservation of modern heritage, as well as the strides made in recent decades in policies and practice to preserve the region's modern architectural and urban heritage. In our fourth article, Javier Ors Ausín of the World Monuments Fund (WMF) focuses on the ongoing threats to modernist sites around the world and the efforts WMF has made to highlight risks to these sites and to encourage their preservation and conservation.

Finally, in our roundtable discussion, Ola Uduku, Alfredo Conti, and Vaidas Petrulis explore how modernism has been expressed in Africa, Latin America, and Eastern Europe—not only how it developed differently in different regions, but also the commonality in the societal desires that propelled it, including the creation of a national identity, a movement toward democracy and independence, and an improvement in people's lives. Ultimately, as Alfredo Conti notes, we need to understand the *value* of modern architecture in terms of the way it improves the quality of life for people.

A handwritten signature in black ink, which appears to read "T. Whalen". The signature is fluid and cursive.

Timothy P. Whalen

John E. and Louise Bryson Director

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ON THE COVER

Baha'i House of Worship (the Lotus Temple) in New Delhi, India. Designed by architect Fariborz Sahba and constructed in the 1980s, the building is composed of twenty-seven freestanding white, marble-clad "petals" arranged in clusters of three to form nine sides, reflecting the Baha'i belief in the mystical properties of the number 9. Photo: Arian Zwegers. Licensed under the Creative Commons Attribution 2.0 Generic license.

MODERN HERITAGE IN THE TWENTY-FIRST CENTURY

BY SUSAN MACDONALD

Ten years ago, the Getty Conservation Institute (GCI) launched the Conserving Modern Architecture Initiative (CMAI), affirming our commitment to this emerging area of conservation in the spring 2013 edition of *Conservation Perspectives*. The feature article outlined commonly cited issues in conserving modern architecture identified in the 1990s, the pioneering decade of modern heritage conservation.

These included a lack of recognition and formal protection; an absence of a shared methodological approach; technical challenges arising from the limited life span of some modern materials coupled with insufficient knowledge of and experience with their conservation; and functional obsolescence attributed to the expanded building typologies and the ethos of functionalism. A decade on, what is the state of conserving modern heritage? Are the above challenges still priorities?

Conservation practice is continuously evolving, responding to new interpretations of histories, shifting societal priorities, changing governance systems, emerging threats, and other drivers. Ongoing development of heritage practice is vital to positioning conservation relative to societal priorities, contemporary governance, and policy frameworks in order to secure support and resources.

Reflecting on progress to date provides a platform for identifying future efforts, something many organizations committed to this heritage, including the GCI, are currently contemplating.

Considerations include whether attitudes have changed toward modern heritage and its conservation. Have the definition, nature, and scope of modern heritage shifted? Has progress been made in its conservation? Are there emerging issues or changing priorities? Are there places from the recent past considered worthy of conservation? In the face of climate change and the imperative for sustainable development, where does conserving modern heritage fit within larger societal concerns and priorities? This is particularly apt for the heritage of the mid-twentieth century on, created during what is now sometimes termed the period of Great Acceleration.¹ Can this heritage be part of the solution—or is it part of the problem?

GROWING INTEREST AND BROADENED UNDERSTANDING

Recent decades witnessed growing interest in conserving twentieth-century heritage, particularly places dating from the 1950s on, as evidenced by the growth of advocacy organizations, conferences, educational opportunities, publications, and research projects on the subject. A rising number of twentieth-century places are now protected around the world. The World Heritage List includes some one hundred modern places of outstanding universal value, including individual structures, contributors to serial nominations, ensembles, and urban areas, with many more nominations in preparation. Membership in the Iconic Houses network of architecturally significant house museums has nearly doubled in the organization's first decade. Many universities now include content on conserving modern heritage in various programs, and more opportunities for

1. The Great Acceleration is a concept posited by scientists in the early 2000s at the International Geosphere-Biosphere Programme in a series of graphs illustrating socioeconomic and environmental trends used to demonstrate an unprecedented period of acceleration and change in the Earth system.



Park Hill housing estate, Sheffield, England, designed by the Sheffield City Architect's Department under J. L. Womersley in 1957–60. Decades-long efforts to save Park Hill exemplify the challenges of conserving large-scale, postwar concrete heritage. The complex—995 flats, as well as shops, pubs, and other facilities—was listed Grade II* in 1998, and protected from demolition but faced numerous technical, social, and financial issues that illustrate the difficulties and potential solutions to such conservation schemes. Photo: Elsa Haarstad, GCI.

professional training are available.² GCI research has revealed a huge upsurge in books, conference proceedings, research papers, and journal articles. Social media is engaging new audiences via emerging interest groups across the globe. The Bucharest-based Socialist Modernism platform, for example, has over 440,000 Instagram followers, effectively advocating for the protection of socialist modernist heritage by harnessing engagement and inviting contributions via social media and grassroots publishing efforts.

Global interest in modern heritage is inevitably a result of the passage of time, but it has been stimulated by reframing the scope and meanings of “modern heritage.” Definitions of modern and modernity and critiques and interpretations of the term *modernism* have expanded to recognize multiple modernities that are place and time specific—deepening global understanding of the richness and diversity of this heritage.

Until recently, the canonic history of modern architecture used in heritage assessment was framed largely by European and North American scholarship focused on the works of the Modern Movement and its successors, but this began to shift in the early 2000s. While recognition of the many interpretations of modern architec-

ture has been part of professional conservation discussions since then, calls for greater diversity, inclusion of multiple histories, and reframing of the discourse have given greater momentum to redefining modern heritage conceptually and reassessing its heritage values.

The World Heritage Centre's regional meetings between 2002 and 2005 sought to broaden global recognition of modern architecture, but the framing was grounded in past approaches. DOCOMOMO International, whose interest had been specific to the Modern Movement, expanded its area of inquiry in its 2006 biannual conference “Other Modernisms,” held in Ankara, Turkey.³ The ICOMOS International Specialist Committee for Twentieth Century Heritage (ISC20C), established in 2001, purposefully chose a time-based reference, reflecting an interest beyond architectural movements or typologies. The GCI focused its area of interest on the modern era—the term used loosely to include heritage places of the postindustrial age—to recognize multiple time- and place-specific interpretations of modernity. The GCI worked with ICOMOS ISC20C to promote an approach to identifying heritage framed by historical themes of global relevance that could be tested locally—a contrast to the canonic

2. Margherita Pedroni, Cesar Bagues Ballester, Andrea Canziani, Wessel de Jonge, and Chandler McCoy, *A Global Survey on Education and Training for the Conservation of Twentieth-Century Built Heritage: Research Report* (Los Angeles: Getty Conservation Institute; Lisbon: DOCOMOMO International, 2020). https://hdl.handle.net/10020/gci_pubs_global_survey_education.

3. See <https://docomomo.com/ankara-2006/>.

architectural historical approach more common for identifying modern heritage.⁴

Regardless of the redefinition efforts, implicit in the various organizations' attempts to frame their focus on an emerging heritage that posed distinct conservation challenges is the concept of rupture—the idea that there was a fundamental shift in the nature, character, and underlying ideas enshrined in the built environment of the last one hundred years or so, both conceptually and materially. The catalyst for the rupture was large-scale industrialization.

A new generation of scholars in Asia, the Arab States, Latin America, and Africa are revisiting, critiquing, and redefining modernity and modernism within their regional and national contexts. The Modern Heritage of Africa program, established in 2020, aims to explore meanings of modern heritage in Africa, raise awareness of this heritage, build conservation capacity, and redress the imbalance in the World Heritage List for modern sites of the African continent. The *Cape Town Document on Modern Heritage*, which emerged from the program, sheds light on the need for a reframing of what modern means and urges telling the full story of modernity through multiple lenses.⁵ Nongovernment and professional regional groups such as the Arab Center for Architecture and the modern ASEAN (Association of Southeast Asian Nations) architecture project (mASEANA), studying modern architecture in context and advancing its conservation, are bringing attention to a greater variety of heritage places, shifting perceptions of what is important and why.⁶ Government heritage agencies across the Emirates, South and Southeast Asia, and South America are establishing regional and national frameworks for modern heritage, enriching understanding of the legacy of the modern era and its multiple modernities, each with its own character and quality, and reflecting distinct histories. How such reexaminations may prompt different approaches to conserving modern heritage remains to be seen.

Perhaps this widespread interest in modern heritage—recognized as history that deserves protection and care—demonstrates that its conservation has been mainstreamed. Yet it continues to be among the most “at risk” types of heritage. We are still losing important places or having them irreparably damaged through unsympathetic change.

Conservation efforts initially focused on the architectural icons of modern heritage, a term used to elevate certain heritage places to worthiness, potentially implying everything else was unworthy. Now there is increasing recognition of more ordinary or everyday modernism. This has steered attention toward places more broadly representative of the significant historical shifts that characterize the twentieth century, often resulting in greater engagement of local communities by recognizing places they value.

EMERGING HERITAGE: NEW CONSERVATION CHALLENGES

Typically, places begin to be deemed worthy of heritage recognition after about thirty years. The cycle often starts with expert or

scholarly examinations of history or advocacy from aficionados of particular places, with wider public recognition occurring around their fifth decade. Formal protection mechanisms reflect this trend. Many countries require a place to be thirty or fifty years old to gain protection, some require places to be much older, with few countries providing protection for places from any era. Thus we are beginning to see the study, protection, and conservation of places created toward the end of the twentieth and the beginning of the twenty-first centuries, including works described as postmodernist. The heady final decades of the last century gave rise to the global practices of architects such as Frank Gehry, Norman Foster, I. M. Pei, Richard Rogers, Renzo Piano, Zaha Hadid, Kenzō Tange, and many more. Equally influential were architects working within national contexts, including Bruce Goff, Ricardo Legorreta, Glenn Murcutt, and B. V. Doshi, who produced an exciting range of expressions rooted in local traditions. These works share many of the challenges of the previous era—the exuberant and experimental use of new materials and increased focus on prefabrication and technology-driven construction techniques. With greater complexity come greater risks. Large-scale changes in late twentieth-century building design and production correlate with a rise in litigation and the emergence of a new industry for specialist engineers and others dealing with defect identification and mitigation in construction. The nature of the buildings and the processes associated with their repair are likely to impact what and how we conserve in the new crop of heritage places coming up for attention.



Sainsbury Wing of the National Gallery, London, designed by Robert Venturi and Denise Scott Brown, and completed in 1991. In 1984 architects ABK designed a new wing for the gallery in the modern idiom, which after being criticized by then-Prince Charles and others was abandoned. In 1986 Venturi and Scott Brown won the competition for a new design. Although considered a postmodern icon and listed Grade I in 2018, the wing is currently undergoing renovations that heritage organizations have decried as unacceptable. Photo: Richard George. Licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license.

4. Susan Marsden and Peter Spearritt, with contributions from Leo Schmidt, Sheridan Burke, Gail Ostergren, Jeff Cody, and Chandler McCoy, *The Twentieth-Century Historic Thematic Framework: A Tool for Assessing Heritage Places*. Los Angeles: Getty Conservation Institute, 2021). https://hdl.handle.net/10020/gci_pubs_historic_thematic_framework_tool.

5. *The Cape Town Document on Modern Heritage*, 2021, <https://onlinelibrary.wiley.com/doi/full/10.1111/cura.12520>.

6. <https://arab-architecture.org/about>; <https://www.maseana.iis.u-tokyo.ac.jp/>.



Lorraine Motel, Memphis, Tennessee. This example of everyday modernism is recognized for its role in the US Civil Rights Movement and is part of the International Coalition of Sites of Conscience. Built and owned by African Americans, the motel was safe lodging for Black travelers during segregation. In April 1968 civil rights leader Dr. Martin Luther King Jr. was assassinated while standing on its balcony. Following its 1988 closure, the building became the centerpiece of the National Civil Rights Museum, which opened in 1991. Photo: Madeleine Jettre / Alamy Stock.

MULTIPLE VALUES, MULTIPLE CONSERVATION RESPONSES

Contemporary conservation promotes identifying and conserving the full range of heritage values (typically aesthetic, historic, scientific, social, and spiritual). Most places are host to tangible *and* intangible attributes, and both aspects of significance need to be sustained. Early efforts in conserving modern heritage emphasized aesthetic values and focused on preserving fabric. While values may be most commonly evident in the fabric, understanding of how intangible values and attributes contribute to significance is improving. Values related to associations with and meanings for communities, or uses and practices relating to a place, need to be identified and mechanisms to sustain them included in conservation. Although social significance is not a new concept and we have become better at identifying it, we remain inexperienced in managing it. Involving stakeholders in all stages of the conservation process is increasingly expected, which better secures sustainable outcomes. Professionals involved in modern heritage are only beginning to grapple with the implications for conservation in terms of which values take priority and how they are conserved.

SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE

Climate change impacts to heritage places and how conservation actions either contribute to mitigation or, the reverse, contribute to climate change, are issues at the forefront of conservation

discourse. Many governments and for-profit and nonprofit organizations now must report on their efforts to contribute to local and global sustainable development goals (SDGs) as defined in the United Nations SDG framework.

Heritage governance to date has functioned largely on the margins of central governance and policy, working alongside, aligning with and sometimes in conflict with, other related areas such as environmental management, urban planning, and cultural and economic development. With increasingly competing priorities for funding, such positioning is ineffective, hence the call to better integrate heritage management into broader governance and policy frameworks. Therefore, mechanisms are needed where public-benefit outcomes are collapsed together, recognizing conflicts and disbenefits—or when joined-up benefits can be leveraged to create multiplier effects. How this operates in practice is a work in progress.

Rethinking our approach is vital to effectively conserve modern heritage. In many parts of the world the bulk of the built environment dates from the period of the Great Acceleration, the last seventy years—a single human lifetime—and is tangible evidence of the most rapid changes in production and consumption in history. Public debate on the merits of conserving this heritage based on aesthetic, social, or sometimes environmental grounds has not always gained traction. We can't conserve it all, but we can't discard it either. The environmental impact of demolishing and replacing huge concrete structures and complexes, for instance,



Kaédi Regional Hospital extension, Kaédi, Mauritania, designed by Fabrizio Carola and Birahim Niang and completed in 1992. To expand a conventional concrete-framed hospital building, the architects developed a low-cost approach utilizing local materials and labor. The resulting series of passively cooled and naturally lit mud-brick domes uses African concepts of modernity to meet contemporary needs. Photo: Alexis Doucet. Licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license.

is already being questioned. Consideration of the environmental costs of replacement, our expanded recognition of values to include social significance, and burgeoning interest in everyday heritage all open the door to new approaches to dealing with the legacy of the built environment that includes but also moves beyond conservation per se. Countries such as the Netherlands, Denmark, and France are integrating whole life-cycle carbon assessments into planning processes. This may have either positive or negative consequences for modern heritage.

Where does conservation, as currently defined, fit in? Conservation may be just one of the appropriate actions—along with recycle, repurpose, or adapt, or even ruination to sustain the values of a place in balance with other societal imperatives. Repair, restore, and refurbishment are already part of the conservation tool kit. Do we need to expand the tool kit to both better preserve values unrelated to fabric and better secure a role for heritage in climate change and sustainable development responses, consequently engendering greater public support for modern heritage? What does this mean in practice? How do we ensure we don't overcompensate in the willingness to make conservation fit current climate change imperatives?

Technical limitations to conserving modern heritage have been a stumbling block in meeting existing conservation standards and are also problematic in dealing with climate change mitigation. In 2013 the GCI identified a list of needs to address the technical challenges of conserving modern heritage, including scientific research on modern materials and systems, practical guidelines, and training.⁷ While many more research projects are now underway by academia, industry, and occasionally both, the

scope and scale of the issues and the huge array of materials and their associated challenges are such that research hasn't made much of a dent. Efforts by the few agencies undertaking significant research on technical challenges such as concrete conservation remain nascent, and outcomes are only slowly being translated into technical guidelines and affecting practice. Despite a



Cité du Grand Parc social housing, Bordeaux, France, before (left) and after (right) renovation by the firm of Lacaton and Vassal in 2016. Once demolition of this 1960s public housing complex was ruled out, Lacaton and Vassal reimagined three 10- to 15-story housing towers to give tenants more space and light, upgraded facilities, and improved energy efficiency. Using prefabricated materials, 530 units were rehabilitated without displacing residents. Although not conservation per se, the project demonstrates a sustainable approach that retains use and social values while reducing waste and meeting demands for carbon reduction in construction. Photos: ©Philippe Ruault-Photographer.

7. Kyle Normandin and Susan Macdonald, *A Colloquium to Advance the Practice of Conserving Modern Heritage: March 6-7, 2013: Meeting Report* (Los Angeles: Getty Conservation Institute, 2013). http://hdl.handle.net/10020/gci_pubs/colloquium_report.

growing number of university research projects, such work takes time, and short-term funding doesn't support the long-term effort required to bring results to practice. We still need focused, practically oriented research to address some of the challenges. In order to determine how conservation can respond to climate change and address large-scale challenges associated with the big heritage of the modern era—huge housing, educational, and industrial complexes, infrastructure, and urban areas—an understanding of how to deal with physical fabric at a conceptual and practical level is necessary.

CONSERVING MODERN HERITAGE AS A CATALYST FOR CHANGE

Evidence suggests that modern heritage today is better understood, appreciated, and conserved than ever before. Conserving this heritage has been mainstreamed into the continuum of practice; it is now generally accepted that conservation approaches, tools, and methods used for heritage of earlier eras are appropriate for modern heritage.

But important issues remain. There is a need for more research, information, and training to equip professionals to conserve this legacy. How do we expand our tool kit to deal with both the ordinary everyday and the big heritage of the modern era? When dealing with modern heritage, we face the most critical heritage issues of the day—how to manage social values, confront climate change, contribute to sustainable development, and engender the support of communities and authorities. The emerging heritage



of the late 1990s and early twenty-first century complicates many of these challenges. But it is our hope that in grappling with these issues new approaches and frameworks for heritage practice more broadly will, inevitably, emerge.

Susan Macdonald is head of GCI Buildings and Sites.

Keeping It Modern

In 2014 the Getty Foundation launched Keeping It Modern (KIM), a global grant initiative dedicated to conserving modern architecture. A complement to the GCI's Conserving Modern Architecture Initiative (CMAI), KIM's goal was to help stewards of modern sites undertake the planning and diagnostic work that underpin conservation. Over seven annual competitive grant cycles that concluded in 2020, KIM awarded \$11.8 million to support conservation at seventy-two significant modern buildings in thirty-eight countries. From the National Schools of Art of Cuba to the Accra Children's Library in Ghana to Luce Memorial Chapel in Taiwan and the Buzludzha Monument in Bulgaria, the program aided a geographically, architecturally, and typologically diverse collection of significant twentieth-century places.

KIM's primary focus was on research and planning. This supported CMAI's efforts to demonstrate that internationally recognized conservation planning methodologies developed for buildings from earlier eras can be applied to modern sites. To support grantees in adopting values-based management practices through the conservation management plan methodology, CMAI delivered six annual workshops in London and one virtually attended by 166 conservation professionals and building managers representing KIM grantees. These workshops gave grantees the opportunity to share experiences with peers and helped establish a network of stewards of modern heritage sites.

KIM has boosted international awareness of sound conservation planning and through its digital Keeping It Modern Report Library has made completed conservation management plans freely available to serve as models for stewards of other modern heritage places.

The Getty Foundation extended the initiative in 2022 with Conserving Black Modernism, a two-year, \$3.1 million grant program in partnership with the National Trust for Historic Preservation to preserve modern US sites by Black architects and designers. The National Trust will administer the grants through its African American Cultural Heritage Action Fund, the largest US resource for preserving African American historic places. A first round of grants will be announced in summer 2023.

THE CONSERVING MODERN ARCHITECTURE INITIATIVE

The First Ten Years

BY CHANDLER MCCOY AND GAIL OSTERGREN

TWENTIETH-CENTURY BUILDINGS FACE UNIQUE and daunting challenges related to their conceptual, design, and material characteristics, which have been well discussed over many decades. By the 1980s, these buildings were not yet widely appreciated as heritage and were increasingly under threat of alteration or demolition. Heritage authorities and other trained conservation professionals lacked proper tools to evaluate and conserve these places.

In the late 1980s, the protection and conservation of modern architecture began to gain serious attention. Organizations were formed to advocate for its protection, conferences on the topic were held, scholarship emerged, and heritage authorities added twentieth-century places to their heritage lists.

The Getty Conservation Institute (GCI) sought to contribute to this effort by establishing its Conserving Modern Architecture Initiative (CMAI) in 2012 with the aim of advancing the conservation of modern architecture internationally. As a relative latecomer to this new area of conservation, CMAI carefully considered how it could support this emerging community of practice.

During CMAI's planning phase, the GCI took steps to define its goals and activities, beginning with assessing the state of the field and consulting with a wide range of people already working to conserve modern heritage. This culminated in a 2013 colloquium at the Getty Center that brought together an international, multidisciplinary group of practitioners, educators, and representatives of key conservation organizations to share their views on the field's needs, identify knowledge gaps, and prioritize actions. The group's recommendations helped CMAI fashion a road map for the years ahead.

CMAI is organized around several broad, overlapping areas of action. These include researching modern building materials and developing means and methods of conserving them; creating new tools for identification, assessment, and interpretation of modern heritage places; delivering training courses for midcareer professionals; and developing and disseminating practical technical information to help architects, conservators, and building owners and stewards tackle maintenance and conservation challenges. These activities come together in CMAI's model field projects, which result in focused and often hands-on diagnosis and conservation efforts.

This initiative is one of several Getty programs dedicated to modern architecture. CMAI builds on the GCI's Modern and Contemporary Art Research Initiative, launched in 2007, and the Getty Research Institute's rich collections related to modern architecture.



Notre-Dame du Raincy, designed by Auguste and Gustave Perret and completed in 1923. This masterwork of early reinforced-concrete construction was one of France's first concrete churches and is now a research project site of PEPS, a collaboration with Historic England and the Laboratoire de Recherche des Monuments Historiques (France). Here, the team is undertaking investigations of earlier concrete patch repairs to the bell tower. Photo: @LRMH.

The Getty Foundation's Keeping It Modern grant program (see sidebar p. 9) was developed to complement and support CMAI, and the GCI's Built Heritage Research Initiative, begun in 2016, undertakes scientific research on modern materials, such as concrete, identified as priority concerns.

With the tenth anniversary of the GCI's Conserving Modern Architecture Initiative, we are reflecting on its accomplishments—some highlighted below—and planning for its future.

CREATING AND DISSEMINATING RESOURCES

The availability of focused technical resources is vital to practicing architects and building conservators as they develop conservation solutions for modern buildings. Creation and dissemination of useful materials that advance the practice of conserving modern places is at the core of CMAI's mission. To date CMAI has produced some eighteen publications, two of which have been translated into Spanish and French. Whether they are products of one of our field

projects, reports on expert meeting outcomes, bibliographies on conservation-related literature, or the results of an in-depth research project, most of these resources are available for free on our website.

Given that modern heritage is still not widely recognized and protected in many parts of the world, the GCI collaborated with the ICOMOS Twentieth Century Heritage International Scientific Committee to develop *The Twentieth-Century Historic Thematic Framework: A Tool for Assessing Heritage Places*. This work promotes evaluation of twentieth-century heritage utilizing a thematic approach, which helps practitioners look beyond the great works of architecture or places where important events occurred, and consider the historical context in which they were created. This can lead to broader thinking about what constitutes heritage and help users identify a wider, more representative range of significant places and tell more layered stories about them. This tool distills the principal social, economic, political, and technological drivers that shaped the twentieth century into ten succinct, interconnected themes and illuminates ways that they are represented in the century's buildings, landscapes, infrastructure, and urban areas. Since its publication as a free downloadable PDF in 2021, CMAI has promoted its use through an ongoing series of workshops produced with international partners and by translating it into several languages.

CMAI is also working to meet the need for well-vetted case studies demonstrating practical solutions to actual conservation challenges through its *Conserving Modern Heritage* book series, launched in 2018. Each volume is edited by a team of subject matter experts and features a collection of case studies devoted to a single material, technical, or methodological challenge specific to modern heritage. They have proven highly beneficial for practitioners working through similar challenges. Two volumes—*Concrete* (2019) and *Managing Energy Use in Modern Buildings* (2021)—have been published to date, and additional books are forthcoming.

UNDERSTANDING AND CONSERVING MODERN BUILDING MATERIALS

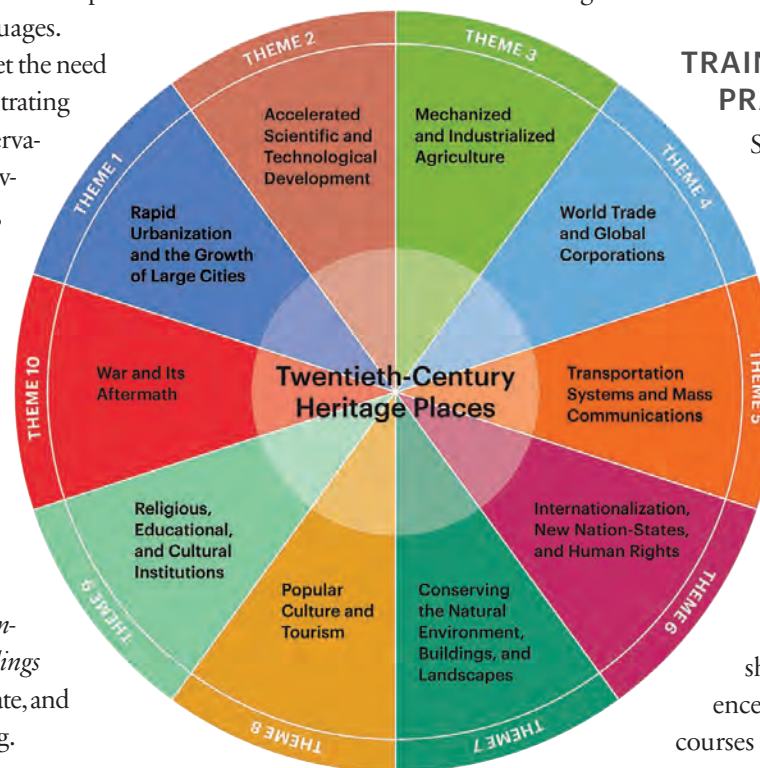
Currently, there is a lack of practical conservation knowledge to address the complex physical challenges associated with modern architecture. Developing and implementing new approaches to these materials- and systems-based conservation challenges is a core interest of CMAI and a fundamental component of our field projects.

Through its Concrete Conservation work, CMAI is focused on issues surrounding reinforced concrete, the most ubiquitous building

material of the twentieth century. This was the preferred material of many architects and engineers, who exploited its possibilities in myriad innovative ways. Like many modern materials, concrete presents unique conservation challenges, which are magnified by the sheer volume of concrete heritage structures worldwide.

CMAI's approach has included creation and publication of reference materials and guidance documents for practitioners. An annotated bibliography, *Conserving Concrete Heritage*, provides access to resources on concrete's history, deterioration mechanisms, and repair methods. *Conservation Principles for Concrete of Cultural Significance* is a framework for decision makers, available in three languages.

The largest and most complex component of Concrete Conservation is Performance Evaluation of Patch Repairs on Historic Concrete Structures (PEPS), which seeks to address the lack of knowledge on the efficacy and durability of existing concrete repair solutions and the scarcity of technical resources on concrete conservation. Currently underway, PEPS—a partnership with Historic England and the Laboratoire de Recherche des Monuments Historiques (France)—is developing research to evaluate the performance of concrete patch repairs designed for and executed on culturally significant structures.



TRAINING AND EDUCATING PRACTITIONERS

Strengthening the conservation field's capacity to conserve and manage the twentieth-century built environment is key to ensuring that this important heritage is well cared for. Developing and delivering training programs and didactic materials that promote sound conservation methodologies and best practices, as well as scientific knowledge, has been central to CMAI's program.

Initially, these trainings consisted of half-day and full-day workshops delivered at professional conferences. Later, short multiday introductory courses were created that covered a range of conservation issues. The three-day Introduction to

Conserving Modern Architecture course—which covered topics ranging from broad conservation practices to focused sessions on diagnosis and repair of modern building materials—was taught by Getty staff and a geographically diverse group of practitioners to an international audience; it was offered in person in 2018 and 2019, and virtually in 2021. CMAI's next training, the International Course on the Conservation of Modern Heritage, will take a hybrid approach to deliver a greatly expanded curriculum in 2023. Whether conducted online or in person, participants in GCI training have an



A view of the galleries in the Government Museum and Art Gallery, Chandigarh, India, designed by Le Corbusier and completed in 1968. The building was designed to be naturally ventilated and lit by natural daylight. CMAI's investigations will evaluate how well this is working and will identify improvements to create a better environment for people and collections while protecting architectural values. Photo: Tim Webster, © J. Paul Getty Trust.

opportunity to learn from and network with peers, which supports development of a community of practice. CMAI has also developed and delivered a training series on conservation planning methodologies to recipients of grants through the Getty Foundation's Keeping It Modern initiative. To date some 430 professionals have completed one of our training courses.

To better understand the state of education and training on twentieth-century built heritage conservation worldwide, the GCI and the DOCOMOMO International Specialist Committee on Education and Training collaborated on *A Global Survey on Education and Training for the Conservation of Twentieth-Century Built Heritage* in 2018 (published in 2020). Responses from 261 individuals representing universities and training organizations around the world demonstrated that the subject is gaining traction and is increasingly taught in many universities. However, there remains a shortage of education and training opportunities, especially at the professional level and in some regions. The responses confirmed that CMAI should continue its training efforts, and these results are shaping our current and future programs.

FIELD PROJECTS AS CONSERVATION MODELS

Much of the work of GCI's Buildings and Sites department, where CMAI sits, is conducted through model field projects that allow us to develop and demonstrate new conservation methodologies, tools, and techniques. Through these projects, we enhance understanding of notable cultural heritage places, improve their practical conservation, and build capacity to sustain them. Each field project brings together multiple activities, such as materials investigation and conservation, conservation management planning, and capacity building. Thus far CMAI has undertaken three field projects. The first two—at the Eames House and Studio and the Salk Institute for Biological Studies—were drawn from Southern California's remarkable collection of iconic modern buildings. The third, a partnership with the Government Museum and Art Gallery in Chandigarh, India, takes us much farther afield.

The Eames House and Studio, designed by Charles and Ray Eames in 1949, is an internationally renowned work of modern architecture located in the Pacific Palisades neighborhood of Los

Angeles. Since 2011 the GCI has worked with the Charles and Ray Eames House Preservation Foundation to support the maintenance and management of the house, its landscape, and its collection through hands-on investigations and improvement projects, as well as through development of the *Eames House Conservation Management Plan* to guide its ongoing care. The Eames House Conservation Project aims to demonstrate the applicability of established conservation approaches to twentieth-century cultural heritage sites. It also investigates and develops approaches to common challenges of conserving modern materials, environmental factors in modern buildings, and conserving intangible aspects of significance. The Eames Foundation is currently implementing the GCI's plan for a holistic and sustainable long-term approach to care of the site.

Completed in 1965, the Salk Institute for Biological Studies in La Jolla, California, is an internationally significant work of modern architecture and is considered one of architect Louis I. Kahn's most important works. With our partner the Salk Institute, we worked to conserve rather than replace the deteriorated original teak window wall assemblies, a highly significant element of the site. The GCI brought its scientific expertise to undertake diagnostic and investigative work and develop the conservation principles and guidelines used to conserve the teak. Over two-thirds of the original Southeast Asian teak was conserved in place, preserving a material that is both culturally significant and a rare natural resource, thus demonstrating that conservation has a place at the core of responsible asset management practices.

The Government Museum and Art Gallery in Chandigarh, India, one of only three museums in the world designed by the Swiss-French architect Le Corbusier, was completed in 1968. This project is a collaboration between CMAI and GCI's Managing Collections Environments Initiative working in partnership with the museum. It aims to develop an environmental and collections management strategy that safeguards the museum's important collection of Indian art without compromising the architectural significance of the iconic building. Reconciling contemporary environmental collection care needs with human comfort and sustainability and with the conservation of architectural significance is a recognized challenge for modern heritage. This project demonstrates appropriate investigative methods and methodologies that provide solutions to this challenge.

THE NEXT TEN YEARS

While CMAI has accomplished much in its first decade and the field has made great strides in recognition and conservation of the world's modern heritage, much remains to be done. To fully understand CMAI's contributions to the field, in early 2023 we will launch a formal evaluation of the initiative by an independent consultant. We are also embarking on plans to convene a second colloquium to help identify current and emerging needs in the field. The results of the evaluation and colloquium will assist us in shaping the initiative's future activities.

Chandler McCoy is a GCI senior project specialist. Gail Ostergren is a GCI research specialist.

PROTECTING MODERN HERITAGE IN THE ARAB WORLD

BY AMEL CHABBI AND YASMEEN AL RASHDI

IN JANUARY 2023 THE RACHID KARAMI INTERNATIONAL Fair in Tripoli, Lebanon, was inscribed on both the UNESCO World Heritage List and the List of World Heritage in Danger. The complex, designed by Oscar Niemeyer of Brazil in collaboration with Lebanese engineers, was one of the world's largest exhibition centers and part of Lebanon's modernization in the 1960s. Despite remaining incomplete because of the Lebanese Civil War that began in 1975, its recent inscription highlights the need for the World Heritage Convention to protect modern heritage in the absence of national legislation. The growing interest in using the Convention as a protection mechanism is reflected in the increasing number of urban and architectural sites on the Tentative List, including six other twentieth-century sites in the Arab region. The inscription of the Rachid Karami International Fair is an opportunity to reflect on the region's growing interest in modern heritage conservation.

MODERN ARCHITECTURE IN THE ARAB WORLD

The Modern Movement in the Arab region¹ originated in the late nineteenth and early twentieth centuries, but its development varied across regions and countries. In the Maghreb, mostly Western architects tested new concepts, while in the Levant, local architects embraced modernism as a reflection of secular Pan-Arabism.² After World War II, modern architecture spread exponentially in response to ideological shifts, independence movements, economic prosperity, and major territorial transformations, enabling further modernization.³ In the Gulf, a gradual shift in the traditional and vernacular built environment began in the early days of oil exploration and accelerated with the oil extraction boom and commercialization. Modern architecture resulted from an exchange of ideas that had matured elsewhere in the region and circulated successively through the Gulf, combined with an influx of primarily Middle Eastern architects, engineers, and planners to support ambitious nation-building programs.

Construction of new public spaces, such as hospitals, schools, and infrastructure, transformed Arab cities and provided entirely new functions based on new institutions and services.⁴ This was different from the Global North, where these functions had existed



The Cultural Foundation Building in Abu Dhabi, United Arab Emirates.

The rehabilitation of the Cultural Foundation followed a values-based approach, prioritizing the social value it held for the Abu Dhabi community, which chose to rehabilitate and enhance its function as a community facility while preserving its architectural and urban values. Photo: © DCT Abu Dhabi.

previously. Postwar modernism in the Arab world was driven by new secular political agendas and elites, leading to development of a regionalized postmodernism that reaffirmed a sense of place and common culture to build social cohesion and identity.

Recognition and appreciation of modernism as heritage in the Arab world has grown among scholars, researchers, and practitioners, but it faces challenges with institutional and community acceptance that resemble those faced by the international modern heritage conservation movement. The presence of a rich older heritage in some of the Arab world devalues the recent heritage by comparison of age. In other areas where a tabula rasa approach was taken to modern urban development, modern heritage has become ubiquitous while older heritage has become scarce; its rarity has made it appreciate in value.

As a postcolonial legacy, legislation tends to privilege older heritage, leading to misconceptions that modern heritage is an architectural language foreign to the local environmental context and vernacular in terms of design, materials, and functions. However, modern heritage contributes to the narrative of the recent past,⁵ expressing independence, self-governance, new ideals, and hopeful aspirations. Although modern heritage is sometimes associated with painful memories of failed modernization experiments and of conflict, it can serve as an opportunity to reestablish community

1. For this article, the region has been broadly clustered into three subregions: the Maghreb/North Africa; the Gulf region comprising the Arabian peninsula and Arabian Gulf; and the Levant.

2. Karim Hendili, "The Heritage of Urban and Architectural Modernities in the Arab World," in *World Heritage 85* (Paris: UNESCO, October 2017), 44–49.

3. George Arbid and Philipp Oswald, eds., *Designing Modernity: Architecture in the Arab World 1945–1973* (Berlin: Jovis Verlag GmbH, 2022), 11–12.

4. Rami Daher, *Concept Note for Symposium on Modern Heritage in the Arab World* (unpublished, 2022).

5. George Arbid, *Documenting the Modern* (unpublished, 2022).

integrity and social connectivity through the healing power of culture and heritage after the brutality of wars. An important test of the relevance of heritage is in post-conflict times, as people endeavor to restore their communal identities, prioritizing heritage that is “national” in essence, not “international” in spirit. The rehabilitation of the Mosul Museum—a project of the International Alliance for the Protection of Heritage in Conflict Areas (ALIPH), the World Monuments Fund, the Iraqi State Board of Antiquities and Heritage, the Musée du Louvre, and the Smithsonian Institution—recognized the museum’s significance as a national modern heritage landmark and serves as a cornerstone in reviving Mosul’s cultural life after the destruction of the building and its collection by ISIS in 2015. On the other hand, the Grain Silos of Beirut, which were damaged in the 2020 explosion in Beirut Harbor, risk being demolished altogether despite their modern heritage significance and their symbolic value for Lebanon’s collective memory.

OTHER CHALLENGES

The dominance of architectural and aesthetic values in heritage management in the Arab world can be attributed to the struggle with colonial legacies and the modeling of heritage management systems on those of the colonizing states that lack a values-based approach fostering awareness of the *cultural* significance of buildings and sites. Current heritage management systems in the Arab world are often top-down, with conservative levels of community engagement coupled with a lack of robust legal protections for cultural heritage of sociocultural value. Consequently, the discourse has focused on the architectural and aesthetic features of modern heritage rather than their meaningful sociocultural or historical values, overshadowing their significance to local culture and identity.

With the push for economic development in the Arab world, heritage has often been leveraged for the tourism industry to diversify and grow local economies. This results in preservation and promotion of heritage sites popular with tourists—often ancient or historical sites and landscapes that have more touristic value—and overlooking the potential of modern and urban heritage to stimulate equally significant and memorable experiences linked to the present local populations.



Al Remah Rest House in Al Ain, United Arab Emirates, one of the few remaining examples of this type of public facility associated with the late Sheikh Zayed bin Sultan Al Nahyan’s contributions to enhancing livability in underdeveloped remote communities. Modernized and affordable rest houses/motels were established for cross-country travelers providing leisure amenities and a mosque. Photo: © DCT Abu Dhabi.

The challenges in preserving modern heritage in the Arab world include difficulties in stakeholder engagement and collaboration, making it tough to secure funding for conservation efforts because of competing interests and goals. There is also a tendency to idealize the past without taking responsibility for its preservation. Additionally, heritage conservation or basic maintenance is often seen as disruptive or as constraining individuals’ personal development interests. To overcome these challenges, the focus needs to move toward shared civic responsibility and involve a range of stakeholders in the conservation process while highlighting modern heritage’s cultural, historical, and social significance.

A TURN OF THE TIDE

The growing interest in recognizing and protecting modern heritage in the Arab world has led to the establishment of international, national, and local organizations dedicated to studying, recording, researching, and preserving the region’s modern heritage. These organizations have been instrumental in creating strategic and foundational initiatives and institutions.

The Project for the Protection of Urban and Architectural Modernities in the Arab World (MUAMA) initiative, launched by UNESCO’s World Heritage Centre in 2012, sought to celebrate the contribution of modern heritage to the history and cultural identity of Arab countries, recognizing the diversity of modernities within the region. Although the initiative lay dormant for a few years, there is promise of its resurgence as interest in the field and the number of professionals working in it rises. There are currently nine DOCOMOMO chapters in Arab states advocating for the documentation and conservation of modern heritage.

The Arab Center for Architecture—established in Beirut in 2008 as a nongovernmental organization with an archive—offers publications, exhibitions, and an online architecture database, and serves an audience of researchers and professionals seeking archival sources to document modern heritage and inform conservation. The expanding Architects’ Archives, a project of MIT and the Aga Khan Trust for Culture, on Archnet, is also an indication of greater interest in the legacy of the region’s influential architects. Several national pavilions at the Venice Biennale of Architecture have



The Mosul Museum in Iraq in the early 1980s. Designed by Iraqi architect Mohamed Makiya, and opened in the mid-1970s, the building is a national modern heritage landmark. An international project is working to rehabilitate the building in the wake of its destruction by ISIS in 2015. Image in the public domain.

celebrated the legacy of modern heritage in the Arab world and raised the awareness of an international audience.

Arab states have engaged in discussions on modern heritage conservation, with efforts such as the Symposium on Modern Heritage in the Arab World, hosted by the School of Architecture and Built Environment of the German Jordanian University and ICOMOS Jordan; the Inaugural Conference for DOCOMOMO Sudan, hosted by the Sudan Chapters and the Modern Sudan Collective; and the publication launch symposium for *Designing Modernity: Architecture in the Arab World 1945–1973*, hosted by the Goethe-Institut Ramallah. These endeavors reflect a growing recognition of the importance of modern heritage in the region.

It's worth noting that this new interest in modern heritage conservation across the Arab world has prompted many countries to move beyond architecture and aesthetic and shift toward a values-based approach. This approach focuses on heritage's cultural significance rather than solely on physical or material characteristics, emphasizing the importance of the social, cultural, and historical context in which heritage sites are embedded. This bottom-up approach identifies the multilayered values of a site, highlighting social and communal significance, and makes the process of identification and protection more inclusive while guiding decision-making regarding heritage conservation and interpretation.

The Getty Conservation Institute in partnership with Abu Dhabi's Department of Culture and Tourism cohosted in 2022 the virtual "Twentieth Century Historic Thematic Framework Workshop: Exploring 20th Century Heritage Places in the Middle East," to guide the heritage conservation community in applying a thematic approach to modern heritage places in the Middle East. The workshop examined if and how the framework's thematic approach was relevant in the Arab region in identifying significant modern heritage buildings and sites. Bringing together professionals, policy makers, academics, and representatives from heritage groups and organizations who are putting into practice in the Middle East modern heritage conservation programs, the workshops highlighted the ongoing reflection on the themes proposed and some synergies with existing initiatives underway in the region.

In 2018 the rehabilitated Cultural Foundation opened its doors, marking a significant milestone for the United Arab Emirates in the preservation of modern heritage. Designed in 1981 by the Architects' Collaborative with a team led by Perry Neubauer and Iraqi architect Hisham Al Ashkouri, the building served as the first

library and cultural center for the capital city of Abu Dhabi, which had recently formed the UAE. The Cultural Foundation's architecture, combining modern and Islamic elements, made it a social and cultural haven, encouraging inspiration, intellectual growth, artistic expression, and cross-cultural exchange—an emotional anchor for Abu Dhabi. In 2014 the fate of the Cultural Foundation was uncertain, as its significance was thought to be in contradiction with the aim of preserving historic sites relevant to Abu Dhabi and Emirati identity. However, public resistance and the foresight of local leadership saved the building from demolition, an acknowledgment of the significance of modern heritage to the UAE's cultural identity, and sparked efforts by a local institution to establish a program to identify and protect the Abu Dhabi Emirate's modern heritage.

In the last ten years, this initiative has created an inventory of modern architectural and urban heritage, developed policies and guidelines to govern their protection, and launched several projects to rehabilitate modern heritage sites. In 2016 the Cultural Heritage Law of Abu Dhabi Emirate afforded modern heritage the same protection mechanisms as archaeological sites and historic buildings. This legislation set out the criteria for inscription and a grading system

for modern heritage following a values-based approach. It is a pioneering effort for the region and for the country, prompting creation of a national program for the recognition of modern heritage by the local ministry.

LOOKING AHEAD

The Arab world has made strides in catching up to the recognition and protection of its modern heritage since the Global North's development of the international modern heritage conservation movement in the late 1980s. Modern architectural and urban heritage has been identified as an underrepresented category of sites of potentially universal importance on the World Heritage List, and it is hoped that the recognition of modern heritage

in the Arab world on the list will encourage the establishment of national and local legal protection mechanisms for this heritage. Clearly, work done so far in the Arab region has paved the way for ongoing capacity building, stakeholder engagement, and regional collaboration, contributing to celebrating the richness of modern heritage in the Arab world.

Amel Chabbi is Conservation Section Head and Yasmeen Al Rashdi is Head of the Modern and Urban Heritage Conservation Unit at the Department of Culture and Tourism—Abu Dhabi. The authors would like to acknowledge the advice provided by Dr. Hossam Mahdy.



The Rachid Karami International Fair in Tripoli, Lebanon. One of two inscribed modern heritage sites in the Arab region, the Rachid Karami International Fair represents a cross-cultural exchange of ideas in the early 1960s. It was designed by Brazilian architect Oscar Niemeyer in collaboration with Lebanese engineers. Photo: Roman Deckert. Licensed under the Creative Commons Attribution-Share Alike 4.0 International license.

MODERNISM AT RISK

Toward the Conservation of Modernist Architecture



Sardar Vallabhbhai Patel Stadium in Ahmedabad, India. This cricket stadium—designed by architect Charles Correa and engineer Mahendra Raj and completed in 1960—was included on the 2020 WMF Watch list, which was followed by a multidisciplinary project, with Getty support, to prepare a conservation and management plan for the site. Photo: Sanat Jhaveri & Co. Image courtesy of the World Monuments Fund.

BY JAVIER ORS AUSÍN

AS MODERNIST ARCHITECTURE AGES, THIS HERITAGE faces many challenges, including inappropriate management, deterioration, demolition, and lack of legal protection. In response, many professionals are working to conserve this architecture and raise awareness of the twentieth century's enormous contribution to our global cultural heritage.

Among the organizations that are part of this effort is World Monuments Fund (WMF), which seeks to advance heritage conservation. In its work, WMF has sought to engage in inclusive processes that incorporate pluralistic voices and narratives historically relegated to the margins of the global heritage preservation. To a certain degree, that relegation has been the case with heritage from our recent past, because of its relative newness and a lack of appreciation.

A COMMITMENT TO MODERNISM

Founded in 1965, WMF first focused on modernist sites through its World Monuments Watch, a program created in 1996; our commitment to modernism expanded in 2006 when Modernism at Risk, an initiative to preserve modern architecture, was established. The initiative followed four years of WMF efforts to preserve the

A. Conger Goodyear House, a modernist landmark in Old Westbury, New York, designed by Edward Durell Stone in 1938. The house was included in the 2002 Watch, and WMF's advocacy eventually led to the house's preservation and protection. This project was the catalyst for the Modernism at Risk initiative, founded to contribute to preservation of modernist heritage directly. Modernism at Risk produced a book of case studies that illustrated how modernist sites could be sustainable places with vibrant futures, and it organized an exhibition highlighting the challenges and opportunities presented by modernist architecture.

WMF has engaged in different capacities with about fifty modernist sites. The main channel for this engagement has been the Watch program. The Modernism at Risk initiative, on the other hand, has served as the vehicle to complement the Watch by implementing projects and developing strategies for Modernist sites that can serve as models for the field.

While most of the Modernist Watch sites have been in Global North countries, WMF has also focused on modern sites in nations of the Global South, such as La Ciudad Universitaria de Caracas in Venezuela, designed by renowned architect Carlos Raúl Villanueva, which was included in the 2014 Watch. The Watch inclusion was followed by a series of events in collaboration with the Venezuelan

Consejo de Preservación y Desarrollo to raise awareness about its significance; this included a program with the Museum of Modern Art in New York to address Modernism at Risk in Latin America.

PROJECTS IN THE FIELD

Of late we have engaged in model field projects, most recently at the Sardar Vallabhbhai Patel Stadium in Ahmedabad, India, where, with support from the Getty Foundation's Keeping It Modern Initiative (KIM) and in partnership with the Amdavad Municipal Corporation and the National Centre for Safety of Heritage Structures, Department of Civil Engineering, at the Indian Institute of Technology Madras, WMF worked with a multidisciplinary team of local consultants to prepare a conservation management plan (CMP) for the brutalist cricket stadium designed by architect Charles Correa and engineer Mahendra Raj. The project emerged after the stadium was included on the 2020 Watch following a nomination from a group of local Indian architects. After the Watch inclusion, the Getty Foundation included the site in the KIM initiative, and, with Getty support, the WMF team worked with the local nominators and a team of experts to prepare a CMP, finalized in 2022. The process involved thorough research of the site and of concrete conservation, as well as numerous workshops with stakeholders to define the site's significance. The CMP had three objectives: first, to provide the basis for the site's conservation so that it can serve as a vibrant and self-sustaining community hub; second, to offer a model of good conservation practice for other modernist concrete structures in Ahmedabad; and third, to generate more appreciation of the site's social, architectural, and historical significance and of India's modernist architecture more broadly.

The project at the Sardar Vallabhbhai Patel Stadium built on earlier work. WMF included the Post-Independence Architecture of Delhi in the 2018 Watch, a response to the demolition of the Hall of Nations in April 2017. Through a series of events organized with the Delhi Chapter of the Indian National Trust for Art and Cultural Heritage, we urged authorities to acknowledge the significance of India's postcolonial heritage and the contribution of Indian architects to its independence and to its democracy.

In Southeast Asia, WMF recognized the importance of the National Sports Complex of Cambodia in Phnom Penh, designed by architect Vann Molyvann, by adding it to the 2016 Watch list. The stadium, which lacks heritage protection, was included following a nomination from the Vann Molyvann Project, founded in 2009 by Canadian architect Bill Greaves to document the architecture of Vann

Molyvann and raise awareness of New Khmer architectural heritage. WMF and the Vann Molyvann Project sought to highlight the stadium as an icon of "New Khmer-Architecture," a movement that blended Cambodian traditional architecture with the Modernist Movement. Furthermore, WMF advocated protecting the site for public use and as a symbol of the efforts to transform Cambodia from an agrarian colony into a modern state during its first years of independence.¹ WMF's advocacy efforts included supporting an exhibition showcasing the stadium and its history and a series of community activities in collaboration with local partners from the Vann Molyvann Project that included artists engaging with the public to identify their favorite elements of the site.

WMF continues to seek broader recognition of modernist heritage in the Global South and to expand the global narrative about how modernist architecture took different shapes and embodies different meanings in different communities. To that end, WMF included La Maison du Peuple, a modernist auditorium in Ouagadougou, Burkina Faso, in the 2022 Watch. The architecture of La Maison du Peuple combines modernist influences with local vernacular elements, a noteworthy architectural marker of postcolonial identity and democratic values in West African and global architectural history. Although the site is an active and beloved space in Ouagadougou, it is deteriorating owing to long-deferred maintenance, threatening the structure's integrity and usability. To address this—and the lack of local expertise on concrete conservation—WMF is partnering with local professionals and the local school of architecture. The project focuses on building capacity and training younger professionals and students in conservation of modernist concrete architecture, as well as in condition assessment and documentation.



The National Sports Complex of Cambodia in Phnom Penh, as it appeared in 1964. Designed by Cambodian architect Vann Molyvann, the complex has been the focus of an effort by WMF and the Vann Molyvann Project to highlight the building as an icon of "New Khmer-Architecture," a movement that blended traditional Cambodian architecture with the Modernist Movement. Photo: Vann Molyvann Private Collection/World Monuments Fund.

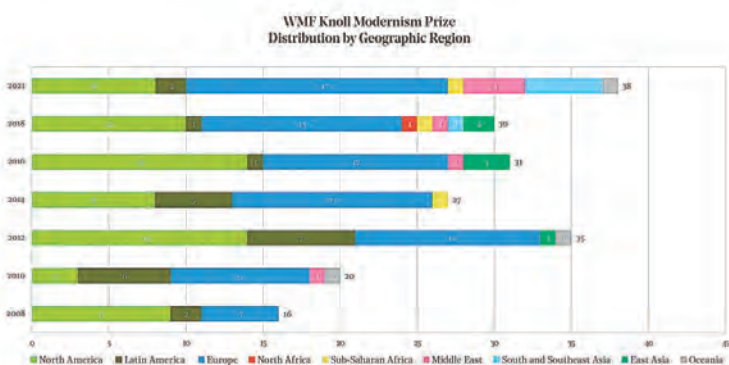
1. World Monuments Fund, *National Sports Complex of Cambodia* (January 2018): <https://www.wmf.org/project/national-sports-complex-cambodia>.

THE MODERNISM PRIZE

In 2008 in partnership with Knoll, Inc.—the US-based manufacturer of modernist furniture designed by renowned architects and designers—WMF established the World Monuments Fund/Knoll Modernism Prize, celebrating architects and preservationists who have implemented exemplary conservation projects to restore, preserve, and adapt modernist sites.

While in our work we often focus on the challenges modern architecture faces to be recognized, appreciated, and preserved, the Modernism Prize provides a positive perspective by recognizing the tireless work many professionals are doing to protect these sites. This work includes architectural and conservation solutions that ensure that modernist sites are restored and revitalized to remain active places for public benefit. The prize also demonstrates that rigorous solutions can be found when there is a will to preserve cultural heritage.

Since the Modernism Prize was founded, seven sites have been highlighted for their restoration. The selection is made by an independent jury of eight architectural scholars, preservationists, and professionals who work with WMF every two years to identify the most thoughtful and innovative project. In 2008 the first prize was awarded to the restoration of the Bauhaus-designed ADGB Trade Union School in Bernau, Germany, by Brenne Gesellschaft von Architekten mbH, led by Winfried Brenne and Franz Jaschke; the most recent prize, in 2021, recognized the restoration by John Puttick Associates of the Preston Bus Station in Preston, the United Kingdom. Only one site was outside Europe: the Hizuchi Elementary School in Yawatahama City, Japan, restored by the Architectural Consortium for Hizuchi Elementary School and recognized with the prize in 2012.²



WMF Knoll Modernism Prize project nominations by geographic distribution. Graphic courtesy of the World Monuments Fund.

The number of prize winners in Europe is probably an indication of the enormous production of architecture on the continent during the twentieth century, but also of Europe’s high level of expertise and resources. On the other hand, it is also indicative of the smaller numbers of conservation projects undertaken at modernist sites in the Global South. Hence the need to support colleagues in that region through building local conservation capacity, providing more

2. World Monuments Fund, *World Monuments Fund/Knoll Modernism Prize 2018* (New York: World Monuments Fund, 2018), 35: https://www.wmf.org/sites/default/files/article/pdfs/knoll_booklet_combined.pdf.



La Maison du Peuple, a modernist auditorium in Ouagadougou, Burkina Faso, which was listed in the 2022 WMF Watch. Its architecture combines modernist influences with local vernacular elements, a noteworthy architectural marker of postcolonial identity and democratic values in West African and global architectural history. Photo: Sputniktilt. Licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license.

resources, and supporting legal protection of significant modernist sites that can contribute to cultural and social life.

Over the years the number of projects nominated for the prize has increased significantly, from sixteen in 2008 to thirty-eight in 2021. Moreover, 2021 had the largest range of countries represented and had nominations submitted by the largest percentage of woman-led and woman-owned firms. While there is much to be done to expand the field, the numbers reflect a trend—previously underrepresented geographic regions in the Global South, such as the Middle East and South and Southeast Asia, are submitting more nominations. Clearly, more conservation projects are being conducted at modernist sites in those regions. That said, Europe and North America remain the most heavily represented regions, with 65 percent of all nominations.

THE FUTURE

Heritage conservation can be viewed as a conversation across different generations and historical periods—a conversation that fosters greater knowledge of the positive and negative aspects of the past. To achieve this, we have the responsibility to include more voices and architectures that tell a fuller and richer story of the past. To that end, we need to foster conservation of modernism in the Global South through research, inventories, community engagement, and education. Projects conducted over extended periods can create cascading effects that help local professionals protect their twentieth-century heritage into the future.

Being both old and new, the twentieth-century modernist architecture of the Global South represents the architectural manifestation of nations seeking to express an optimistic new national identity in the wake of independence. Today, through inclusive conservation practices that retain the avant-garde spirit of modernism, these sites can remain influential in contemporary life, providing spaces for community use while keeping alive that optimistic spirit into the future.

Javier Ors Ausín is an architect and program manager at the World Monuments Fund.

MORE THAN JUST CONSTRUCTION

A Conversation about Rethinking Global Modernism

OLA UDUKU is the head of the School of Architecture at the University of Liverpool and a member of the Nigerian Institute of Architects.

ALFREDO CONTI is an architect and researcher on urban conservation and modern heritage and a professor at La Plata University in Argentina.

VAIDAS PETRULIS is a senior research fellow at Kaunas University of Technology in Lithuania.

They spoke with **CHANDLER MCCOY**, a GCI senior project specialist, and **JEFFREY LEVIN**, editor of *Conservation Perspectives*, *The GCI Newsletter*.

CHANDLER MCCOY What does modern architecture mean in the region where you're from? Do you feel that modern architecture in your area is different from the so-called *modern canon* usually associated with Europe and North America?

OLA UDUKU It depends on where you are in Africa. If we're talking about Southern Africa, it's much more aligned with America—particularly South Africa, which probably has the bulk of recognized Modernist Movement buildings. But for West Africa, the time frames are generally post-World War II up until the early seventies. It kind of maps to the emergence of the independent states in West Africa, most of which occurred from the 1950s into the 1960s. It's situated in a context where there had always been vernacular architecture, which was followed by missionary architecture. This was followed by the architecture of the colonial period, which is about mid-nineteenth century onwards. But by the late 1940s and early 1950s, there's the emergence of self-rule.

The British, it seemed, thought it politically expedient to leave a legacy, and this often meant building schools, hospitals, and other infrastructure that in some ways projected a future where development would happen. These buildings were handed over to the emergent governing elites. Then you've got some big companies constructing a series of buildings by prominent architects in places such as Lagos, Accra, and Freetown. In this period, you also had younger architects, mainly from Western Europe but

also from Eastern Europe, involved in delivering new architecture, which was different from the typical colonial-style architecture. Having said that, there's a current debate as to whether that really is modernism as we understand it in Africa. A long time ago, I wrote a paper in which I argued that places like East Africa have had modern influences for centuries. But in academia—and I would say in most parts of West Africa—the idea of modern really does map closely to the period of independence.

ALFREDO CONTI I can speak not only of my own country, Argentina, but also of Latin America. Most Latin American countries—excepting Brazil and a few small places with British, Dutch, and French colonists—were Spanish colonies, and most of them achieved independence between 1810 and 1830. At the end of the nineteenth century, there were modernization projects in these countries, and there was strong cultural influence from Europe, especially when modern architecture arrived in the 1920s and 1930s.

But I see a difference between the concepts of modernity and modernism. When we speak about modernism, we are especially referring to the Anglo expression in architecture, art, or any landscape design. I think modernity is a broader concept because it also speaks of ideas. In Europe in the 1920s—especially in Germany, France, and the Netherlands—there was, I would say, an ideological approach to modern architecture. But in the beginning, the social ideas of the European modern canon generally were not considered in Latin America, partly because of the region's conservative social and political background at the time. In some cases, rather, the idea of modern architecture was related to an architectural style defined by pure forms, pure surfaces, and the absence of decoration, which was the superficial idea of modern architecture. But from the end of the 1930s onwards, some countries in the region—including Mexico, Brazil, and Argentina—adopted their own interpretation of modern architecture.

VAIDAS PETRULIS In Lithuania, our situation is a bit different. Generally, when we speak about modernism in the public sphere, we're referring to the interwar period. That's because we had independence between the world wars, and after that we

became a part of the Soviet empire. That adds a layer of political dissonance when we speak about mid-century modernism and late modernism. So, when I talk about modernism for us, I'm referring to the twenties and thirties. One aspect of this period was our focus on the garden city movement, which was, obviously, an international movement, but also part of our local identity—transferring traditional life patterns into the urban environment. Lithuania in the nineteenth century was quite an agricultural country. During the interwar period, people moved from the countryside, so the idea of the garden city was important for our identity. In terms of architecture, it meant we preferred human scale and greenery.

From an aesthetic perspective, I wouldn't say we have a version of the Modern Movement. In the interwar period, a younger generation of architects studied architecture in different countries—Italy, Germany, France, Belgium—and obviously brought back ideas. In some cases, those architects met people who were interested in and who had the capability to finance architecture that fit into what we imagine as the traditional canon. But this was more an exception, rather than embracing the modernist standardization. We thought architecture should be monumental, it should be symmetrical, and it should be influenced by the classical understanding of architecture.

Also important was that up until 1940, Lithuanians, Latvians, and Estonians had the important political task of strengthening independence from Russia. That was not easy to do in terms of architecture, but we have a number of buildings in the so-called national style, and this style is related to decorations. Therefore, in our context, use of ornaments is not a crime but a political necessity.

My last point is about materials. When we talk about interwar Lithuania and architecture, in terms of quantity we talk about wooden construction. Not about brick buildings, which were an important part of development but considered a luxury. Our inexpensive wooden housing was, I would say, a local, economic, and technological model for mass housing that had no references to the Modern Movement.

MCCOY Vaidas, you said there were two distinct periods of modernism in Lithuania—the interwar period and the Soviet period. These modernisms were quite different, right?

PETRULIS Completely different. Compared with independent Lithuania, the most important difference was that as part of the Soviet Union, we obviously had to follow the general political line. We were less able to have our own interpretation of the Modern Movement. Still, in the Soviet period we somehow managed to have a local touch to this mass construction and our own interpretation of the Modern Movement. But that was more in the 1970s and 1980s—not the earlier period or the period of heavy industrialization and Stalinist socialist realism.

MCCOY Ola, with regard to Africa, how is modernism seen today? Is it a positive or a negative?

UDUKU You have a period of great aspiration and hope for Africa from the fifties up until about the mid-seventies, and the architecture of the time in some ways symbolizes that. Although it was regarded as being from elsewhere, in the case of West Africa particularly, you do have West African indigenous architects, such as John Owusu Addo from Ghana and Olumide Olumuyiwa from Nigeria. And these architects generally had been trained in the West, either in America, but more likely the United Kingdom because of the colonial link. There was that alignment in education, and the architecture aligns with the jump into development, along with a jump into high-level areas of science, technology, and engineering—or at least that was the aspiration, albeit with backing from former colonial masters, but also from America and countries in Eastern Europe. In some ways, at the social infrastructural level—which includes schools, universities, and hospitals—I think that alignment stays.

But when you look at the day-to-day lives of people, there wasn't really alignment in terms of how people live. There wasn't much of a move toward embracing the socialism that in some ways the Modern Movement was trying to project. It really didn't trickle down that far to everyday life. I guess the negative is that people look back at the seventies with rose-tinted glasses and say, "it was fantastic." Certainly, in people's minds some of those buildings are symbolic of both an era and a form of progress, which unfortunately was cut short.

I'd also say there was a materials change. With modernism comes the ubiquitous concrete cement block. Concrete itself is a very versatile material, but looking at it now historically we're realizing that a lot of the artisanal trades got lost. You don't need to be a perfect cabinetmaker or carpenter. A lot of it just gets cast in concrete. As concrete becomes more ubiquitous but less supervised, the quality of buildings goes down a bit, and that idea about modern gets lost somewhere. And certainly, the incorporation of ideas of identity is limited in the sense that it literally is a modernist box. Generally, there has been a de-linking of what I'd call the local to this style.

MCCOY Alfredo, is modernism now seen in a positive light in Latin America, or is it somewhat mixed there as well?

CONTI Modern architecture first arrived in Latin America through architectural magazines coming from Germany, France, and the Netherlands, and there were architects and artists who traveled to Western Europe. Modern architecture was first adopted by the upper class, not by the government, and it was not the same as what we saw in Europe at the time, where they spoke about social housing. Few people talked about social housing in the 1920s. We had single-family houses or multifamily houses for the upper classes, movie theaters, gas stations, and some administrative buildings for private enterprise. Of course, this architecture was not understood by the general public. For some people it was difficult to understand because there was no reference to the past.



As I understand it, the whole idea of the Modern Movement in its wider canon was that of democracy. For Africa, it's been very important history. As they say, if you don't know your history, you're not going to know your future. It's been very important for architecture students and the community to realize that we have skin in this game.

OLA UDUKU

Perhaps Brazil was the first Latin American country where modern architecture was adopted as an approach to modernization. In the 1930s, there was an important modernization effort in Brazil based on improving the population's quality of life through education and health. At that time, modern architecture was adopted by the government as an expression of the modern state. What I consider the first masterpiece of modern architecture in South America is the former Ministry of Education in Rio de Janeiro, which was a symbol of the democratization of education. In architectural terms, I think that the building's inclusion of some local material—for instance, stone and the use of tiles related to the colonial Portuguese tradition—was the starting point of a local interpretation of modern architecture. In the other countries it wasn't until the end of the 1940s when modern architecture was officially adopted along with new programs involving housing, social facilities, education, health, sport, and entertainment facilities intended to improve society's quality of life.

The perception of modern architecture at that time was, of course, positive. But it was not because the general public understood the values of modern architecture but rather for the benefits it was offering. If I had to talk about the negative interpretation of modern architecture, I would focus on the construction of high-rise buildings in town on small plots that date from the colonial period, creating a chaotic urban fabric or cityscape. Many people say this is the result of modern architecture, but I think it's an inadequate perception of modern architecture. Nowadays, modern architecture is broadly accepted, but not always understood.

JEFFREY LEVIN What prompted this conversation in the first place was trying to understand what modernism means in a global

sense. Listening to the three of you makes clear just how diverse modernism is in how it occurred and how it was manifested. But one parallel I'm hearing is that it reflected the transition from agrarian societies to modern industrial societies. Alfredo, I didn't hear you reference that, but was that a factor in the way modernism developed in South America?

CONTI I didn't mention it, but it's crucial. While there were some experiments in industrialization at the beginning of the century, industrialization really started in the 1930s. One impact was people moving from the countryside to the large towns where the industries were located, in search of better working conditions. The expansion of those cities necessitated housing, health, and educational facilities. It didn't occur in all countries at same time, but that was certainly one of the reasons for the adoption of modern architecture by them.

MCCOY Vaidas—Alfredo and Ola talked about the role that modernism played in the state providing health and educational facilities, and in some instances social housing. But I gather that in Lithuania there's such a strong connection between Soviet domination and social housing, for example, that modernism is not viewed in a positive light. Is that true, or is it more nuanced than that?

PETRULIS Living on the border is a key experience of our region—on the border between communist or totalitarian Russia and our local culture and democratic world. The moving demarcation line has also led to the abrupt changes of the architectural environment. However, it's possible to look at this from two perspectives: practical and conceptual. In the first years after the

war, we had a lot of destruction, so from a practical perspective, the building of housing, schools, hospitals, and cinemas created infrastructure, which really mattered, and we should not forget this. However, on the conceptual level, looking backward, we experience a problematic feeling toward this legacy. Architecture is politics, and we have to deal with the Soviet background. There is no way to escape cityscapes built during this period. This political burden adds another layer of difficulty, and we probably lost a possibility to talk about late modernism without too much emphasizing of the political context.

A big negative impact of the Soviets was also the attitude toward historical places and nature, with disastrous consequences in many cases. During the Soviet period, we lost a lot of significant historical monuments. The attitude toward interwar modernism was quite negative, and it was treated as a kind of bourgeois architecture that should not be preserved or taken care of. But since the interwar construction was of quite good quality, buildings survived.

So, when we talk about modernism in Lithuania, at least in general society, people refer more to the interwar period, not to Soviet architecture. Soviet modernism tends to be reframed as simply Soviet architecture. On the one hand, this creates a certain imbalance between the two manifestations of modernism by over-prioritizing the interwar period. On the other hand, interwar modernism is obviously important and positive because it is related to our identity. And I would even say that this interwar architecture that survived the Soviet period is a kind of monument itself to our independence. In that sense, modernism is important to us not just as a style, but as political evidence of our struggle for independence. And that helps to preserve it.

UDUKU The canary in the African canon is, of course South Africa, where there is that alignment of the apartheid regime and modernist masterpieces—for example, Pretoria as city-state. And the universities there and so on have a particular connotation, which is problematic. Having said that, there are other buildings that are associated with freedom that have a different connotation. I'm thinking particularly about some of the prison buildings where there's that link to the state apparatus. However, I think one of the buildings in Johannesburg, Shell House, was the center for the ANC up until 1997, so it's got a different feel to it.

These buildings do very much embody the politics of the place and time. Anecdotally, when I was a teenager in Nigeria, we knew that the schools being burnt down during the Soweto uprising were better built than a lot of the equivalent schools built in poorer parts of Nigeria. But because of what they symbolized in terms of the Nationalist Party's promotion of the Afrikaans education policy, apartheid and so on, those buildings were never going to be remembered positively, and very few have been saved or conserved. Now there's a much more positive design movement in southern Africa, which supports what is today termed community architecture, so for quite a lot of those buildings the link is incredibly strong with the politics of the time.

LEVIN Because so much of the architecture in various places and for various reasons has a problematic history, what are the implications for its preservation and conservation? What are the implications for making judgments about it?

CONTI Regarding political situations, unfortunately most if not all Latin American countries periodically have social, economic, and political crises. We've had authoritarian governments, and even dictatorships. In some cases, those buildings or ensembles constructed under authoritarian governments are now sometimes rejected on political terms. But what I notice is that we don't look so much at the political content. The agencies responsible for heritage protection may look more at the architectural, artistic, or technical values. Sometimes, according to the government who is ruling the country, there is a preference for preserving certain buildings, and we know there's some political background to those decisions. So there is a relationship in politics and heritage protection, but I think that in the end what remains is the recognition of the architectural urban landscape or technical achievement. The priorities are from an architectural point of view.

UDUKU In the case of a lot of Africa, the issue is really, "Can we afford the conservation requirements?" Part of that is because conservation education is not as well taught as it should be. We're still in a time warp. There's a lot around archaeology and anthropology, and you can see it in terms of UNESCO—the inscriptions tend to be historic landscapes right up to slavery. But the notion of preserving a building that may have had a function fifty years ago and is now subsumed by incredibly tall skyscrapers is very difficult to sell to the public. The idea of these buildings being important and a link to a more global movement was not necessarily understood in architecture schools ten or fifteen years ago. So if among architecture students that wasn't the case, you can imagine what the public's viewpoint is or was. Basically, it is difficult to sell the idea of preserving these buildings, as well as creating an understanding of their identities. If you inscribe it, that's fine, but what do you expect the people to do? There's a whole infrastructure around appreciation of architecture that hasn't been as developed as it should be. There's a lot of playing catch-up in terms of how we do that.

PETROLIS When it comes to preserving architectural legacy, associations really are important. What we try to do—what we always did, actually—is to manage the narrative. And the narrative is that Soviet buildings, for example, were designed by Lithuanian architects and represent not only political power, but also our nation's resilience. We were able to survive in the Soviet context and even to design something that was referred to as Baltic modernism. I would go further into the late 1980s and say that architects were a very important part of the society of intellectuals who led our fight for independence. So in Lithuania, we do preserve, and we do interpret Soviet architecture as evidence of efforts by Lithuanian architects. More problematic is so-called socialist realism,



Beyond the differences among Africa, Eastern Europe, and Latin America, I found commonality in this world of modern architecture. You have agricultural or traditional societies becoming modern societies and the construction of a national identity, of democracy, of independence, of improving the quality of life of people.

ALFREDO CONTI

or Stalinist architecture, when the Lithuanian identity within the system was much less visible.

MCCOY It's interesting that you attribute the protection of these buildings to the fact that you were able to have some control over the narrative, which is incredibly important. In order to make people appreciate anything, especially modern architecture, it has to be explained to them.

LEVIN What is the legacy of what we've called modern architecture going forward? What does it mean for the future in each of your countries or regions? Will it be seen fifty years from now as a remnant of not great significance or a moment in time? Or will it be considered a foundation for things that you can begin to see coming?

CONTI Those buildings are part of our architectural heritage. Perhaps a difference between my region or country and European countries is that in Western Europe, at the beginning of the Modern Movement, there was the idea of disposal. They thought buildings were constructed to last perhaps twenty or thirty years and then would disappear, but that hasn't happened in our countries. Actually, most of them were constructed to last. Perhaps the exception is some housing where the quality of materials was not very good, and today they're not in a good state of conservation, which is why they're not fully appreciated by the public. But in general, institutional buildings remain.

For example, in Latin America university campuses were very important, and you can find excellent modern university campuses in many countries. They were built to last. There were some conservation problems because sometimes the materials or the tech-

niques were experimental, and they didn't know how they would last over time. We had to study how to preserve concrete and steel.

But one of the great qualities of modern architecture is that it could be adapted to new ways of using a building. Especially in those cases where they're protected as part of our cultural urban heritage, they will have that possibility of being used—perhaps not exactly as they were projected sixty years ago, but I think they'll be used and be a lesson for a younger generation of architects.

UDUKU For us in West Africa, with modernism and modernity, both in terms of schools and even in the housing, there was an engagement with climate. These modernist buildings generally performed incredibly well because they embodied the idea about how we live in the tropics. If you look at the work of Alan Vaughan-Richards, you can see he was way ahead of his time. He was referencing solar collectors in the 1960s in Nigeria, and his buildings generally had great climatic performance, without the need for mechanical cooling.

As I said earlier, we benefited, particularly in West Africa, from the involvement in environmental design research of British and other international practitioners. These "modernist-style" buildings were constructed to a very high standard, and in some cases they have lasted for more than seventy years. As you say, Alfredo, modernist structures can often adapt. Even if they're not being used exactly the way they would've been used fifty years ago, they still have a purpose. Because they're so utilitarian, they actually have an extended life. Your model modernist buildings perform incredibly well, and that's going to work in their favor. But I also think this is an area where current architects can take off and go further into interesting directions. I hope that there's more integration with the arts and culture, and so on. I have eminent



The Modern Movement can be understood as an inspiration to show that ideas matter. Architecture is not just the technology, economics, square meters, and so forth. We have had a lot of ideas over the last century that make us believe that architecture is more than just construction.

VAIDAS PETRULIS

faith in the students and the youngsters coming through, and I think this is a possible point in which architecture can look at these recent lessons and evolve into what might transform into genuine national or local narratives.

PETRULIS I would like to talk about the spiritual legacy of modernism and what it could bring to the future. I like the concept of cultural reference, which was mentioned in the Granada Convention,¹ and I see the Modern Movement as a pool of different and interesting ideas, which can be taken as cultural references. For example, throughout the history of Lithuanian modern architecture, we were struggling with questions of identity, with our relationship with nature, with our urban legacy, and with culture. Some of the physical results of modernism we will probably preserve, but the cultural reference—the ideas behind this architectural approach—this is an important aspect as we continue to rethink possibilities of housing in close relation with nature, for example, or something similar. The Modern Movement can be understood as an inspiration to show that ideas matter. Architecture is not just the technology, economics, square meters, and so forth. We have had a lot of ideas over the last century that make us believe that architecture is more than just construction.

UDUKU As I understand it, the whole idea of the Modern Movement in its wider canon was that of democracy. For Africa, it's been very important history. As they say, if you don't know your history, you're not going to know your future. It's been very important for architecture students and the community to realize

that we have skin in this game. Understanding that makes it much easier to get involved in the built environment. The modernist period is interesting because it's still close enough to people's lives. They can see these buildings. There's something about that being a moment in time that we still can engage with.

From an educational perspective, I would say that the last ten to twenty years have been a good and fruitful period. Architectural education is changing in Africa in recognition of these changes. Whatever position one takes on it—whether it's colonized, decolonized, or whatever—the material is out there, and now there's more research and understanding of the international moments of modernity. I've enjoyed this conversation because it's made me reflect a bit more than I would normally do, which is good. It's great to hear from other parts of the world as well.

CONTI This was an absolutely interesting conversation. Beyond the differences among Africa, Eastern Europe, and Latin America, I found commonality in this world of modern architecture. You have agricultural or traditional societies becoming modern societies and the construction of a national identity, of democracy, of independence, of improving the quality of life of people. It's very important to understand that as the *value* of modern architecture, and that could be one of the lessons for the future. When we think about architecture, what we're working on is the quality of life.

1. The Convention for the Protection of the Architectural Heritage of Europe, adopted in 1985.

RESOURCES

CONSERVING MODERN ARCHITECTURE

ONLINE RESOURCES, ORGANIZATIONS & NETWORKS

Arab Center for Architecture:
<https://arab-architecture.org/>

Association of Preservation Technology
International Modern Heritage Technical
Committee: <https://www.apti.org/modern-heritage>

Cultural Landscape Foundation:
<http://tclf.org>

DOCOMOMO International:
www.docomomo.com
Includes links to digital publications and an international register of selected properties, from over the past two decades.

Getty Foundation Keeping It Modern
Report Library: https://www.getty.edu/foundation/initiatives/current/keeping_it_modern/report_library/

Getty Research Institute Architecture
& Design Collections: www.getty.edu/research/special_collections/highlights/architecture_design/

ICOMOS International Scientific
Committee on Twentieth Century
Heritage: <https://isc20c.icomos.org/>
Includes a heritage tool kit, publications, and advocacy information on international safeguards for twentieth-century heritage.

Iconic Houses Network:
www.iconichouses.org

International Committee for the
Conservation of the Industrial Heritage
(TICCIH): <https://ticcih.org>

mASEANa Project:
[https://www.maseana.iis.u-tokyo.ac.jp/Modern ASEAN architecture.](https://www.maseana.iis.u-tokyo.ac.jp/Modern%20ASEAN%20architecture)

Modern Heritage of Africa:
<http://www.mohoa.uct.ac.za/>

Twentieth Century Society:
www.c20society.org.uk
Focused on advocacy and safeguards for architectural heritage and design in the UK.

BOOKS, JOURNALS & CONFERENCES

African Modernism: The Architecture of Independence—Ghana, Senegal, Côte



Sara Lardinois of the GCI assessing a teak wall at the Salk Institute in 2014. The GCI partnered with Salk to address the long-term care of the building's teak window wall assemblies, a major element of the architectural ensemble. Photo: Jeffrey Levin, GCI.

d'Ivoire, Kenya, Zambia, edited by Manuel Herz, Ingrid Schröder, Hans Focketyn, and Julia Jamrozik (2015). Zurich: Park Books.

"Approaches to the Conservation of Twentieth-Century Cultural Heritage: Madrid–New Delhi Document" by ICOMOS International Scientific Committee on Twentieth Century Heritage (2017). https://isc20c.icomos.org/policy_items/madrid-new-dehli-doc/

APT Bulletin: The Journal of Preservation Technology 48, no. 1 (2017), special issue on Concrete, guest editors Frances Gale and Doris Eichburg.

APT Bulletin: The Journal of Preservation Technology 48, nos. 2–3 (2017), special issue on Modernism, guest editors David Fixler and Kyle Normandin.

Concrete: Case Studies in Conservation Practice, edited by Catherine Croft and Susan Macdonald with Gail Ostergren (2019). Los Angeles: Getty Conservation Institute.

For more information on issues related to conserving modern architecture, search AATA Online at aata.getty.edu

Conserving Twentieth-Century Built Heritage: A Bibliography, edited by Susan Macdonald and Gail Ostergren (second edition, 2013). Los Angeles: Getty Conservation Institute. http://hdl.handle.net/10020/gci_pubs_twentieth_century_built_heritage

Designing Modernity: Architecture in the Arab World 1945–1973, edited by George Arbid and Philipp Oswald (2022). Berlin: Jovis.

Docomomo Journal. <https://docomomojournal.com/index.php/journal/index>. Provides access to digital copies of all volumes of the journal.

Managing Energy Use in Modern Buildings: Case Studies in Conservation Practice, edited by Bernard Flaman and Chandler McCoy with Gail Ostergren (2021). Los Angeles: Getty Conservation Institute.

Modern Heritage: Reuse, Renovation, Restoration, edited by Ana Tostões (2022). Basel: Birkhäuser.

Preservation of Modern Architecture by Theodore H. M. Prudon (2008). Hoboken, NJ: John Wiley & Sons.

Proceedings of the Conference on Modern Heritage of Africa, Held at the University of Cape Town, 22–24 September 2021, edited by Shahid Vawda and Edward Denison (2022). Cape Town: MoHoA. http://www.mohoa.uct.ac.za/sites/default/files/image_tool/images/594/MOHOA%20221013%20Document%20Distribution.pdf

Twentieth-Century Building Materials: History and Conservation, edited by Thomas C. Jester (2014). Los Angeles: Getty Conservation Institute. http://hdl.handle.net/10020/gci_pubs_20th_cent_building_materials

The Twentieth-Century Historic Thematic Framework: A Tool for Assessing Heritage Places by Susan Marsden and Peter Spearritt, with contributions from Leo Schmidt, Sheridan Burke, Gail Ostergren, Jeff Cody, and Chandler McCoy (2021). Los Angeles: Getty Conservation Institute. <https://gty.art/TCHTF>

GCI News Project Updates

New Project

ALTA—A HUMAN ATLAS OF LOS ANGELES

Working in collaboration with British artist Marcus Lyon, the GCI is embarking on the creation of *Alta—A Human Atlas of Los Angeles*, a social-impact art project that will map one hundred individuals from across Los Angeles County, each of whom has had a meaningful impact on their communities. Part scientific research project and part art exploration, the *Alta* project will create a set of photographic portraits, app-based oral histories, and ancestral DNA of each person that collectively will provide a snapshot of some of the region's most powerful, but largely unseen, intangible heritage—its people, places, stories, and journeys—and will conserve those features for future generations.

Following an extensive nomination process involving L.A.'s rich and diverse communities, the project's curatorial committee met at the Getty in January 2023 to undertake the unenviable task of choosing the hundred extraordinary individuals who will make up the project's cohort. The committee consisted of Catherine D. Hernandez (Project Manager, Brilliant Corners, and Founder, Archivism); Chon Noriega (Director, UCLA Chicano Studies Research Center); Samantha Morales-Johnson (Land Return Coordinator, Tongva Taraxat Paxaavxa Land Conservancy); Mike Murase (Former Director of Service Programs, Little Tokyo Service Center); Jason Foster (President & Chief Operating Officer, Destination Crenshaw); Edgar Garcia (Assistant General Manager, El Pueblo de Los Angeles Historical Monument); Desserin Pereyra (Director of Organizational Development, 11:11 A Creative Collective); and Kren Malone (Director, Central Library, Los Angeles Public Library).

The project will be disseminated as part of the GCI's involvement with Pacific Standard Time 2024 (PST), a major Getty Initiative that will create opportunities for civic dialogue around some of the most urgent problems of our time by exploring past and present connections between art and science in a series of exhibitions, public programs, and other resources.

FINAL MOSAIKON COURSES

The final training courses of the MOSAIKON initiative—a collaboration of the GCI, the Getty Foundation, ICCROM, and ICCM (the International Committee for the Conservation of Mosaics)—were held in fall 2022.

First was a two-week course in September 2022 titled MOSAIKON Advanced Training on Preventive Conservation Measures for Archaeological Sites with Mosaics: Shelters & Reburial. The training—held in Jordan's capital, Amman—was organized by the GCI and ICCROM, through its Sharjah Regional Office, in partnership with the Jordanian Ministry of Tourism and Antiquities. Through theoretical sessions and field visits, twenty participants from ten countries trained on methods of preventive conservation for archaeological sites with mosaics. Training included discussion sessions, theoretical reviews, group exercises, and field visits to several important historical mosaic sites in Jordan—primarily Jerash, Umm ar-Rasas, and Madaba. It focused on two strategic and sustainable approaches to conserving archaeological sites: use of protective shelters and reburial, both requiring a deep knowledge to implement. Through the exchange of experiences and the use of archaeological sites as outdoor classrooms, participants learned these complex techniques that can contribute to providing more stable environments for vulnerable archaeological remains, such as mosaics.

The second course, focused on conservation of mosaics in storage, was held in Sidon, Lebanon, October 10 to November 4, 2022, in collaboration with ICCROM-Sharjah and the Directorate General of Antiquities of Lebanon. Ten trainees learned a sustainable methodology for documenting and conserving lifted mosaics using lime mortars to stabilize and re-back



MOSAIKON trainees removing a mosaic's temporary clay backing prior to applying a lime mortar backing for long-term storage in Sidon, Lebanon. Photo: Fawaz Charafeddine.

them, along with preventive measures to store them long term. Exercises were conducted with examples from a large collection of lifted mosaics from downtown Beirut that had been moved to Sidon and stored there on wooden panels with protective foam padding above each mosaic section, but without any backing, since 1998. After assessing the condition of the mosaics, participants worked on one mosaic fragment to provide mortar backings and remove the deteriorated facings used to lift them decades earlier. The supervised operations by the trainees ended with the fragment being moved to a prototype metal storage shelving unit for long-term preservation. With the skills gained from this experience, the multiyear task of conserving the entire collection of mosaics from ancient Beirut can begin in the storage facility equipped with a mosaic conservation laboratory and office purpose-built specifically for this training work site.

Through a series of interrelated activities, the MOSAIKON initiative has aimed to build capacity, develop replicable models of best practice, and promote dissemination and exchange of information regarding the conservation and management of archaeological mosaics, whether in situ, in museums, or in storage. Since 2008 the initiative has trained more than two hundred conservation professionals from countries of the southern and eastern Mediterranean region. This dedicated community of practice now has the knowledge and skills to protect and preserve their archaeological heritage and to mentor future generations.

EARTHEN ARCHITECTURE CONSERVATION COURSE IN THE MIDDLE EAST

In fall 2022 the Getty Conservation Institute partnered with the Department of Culture and Tourism—Abu Dhabi (DCT) in organizing the second International Course on the Conservation of Earthen Architecture. This one-month training course—held in Al Ain, United Arab Emirates (UAE), and Nizwa, Oman, from October 22 to November 19—used Al Ain as an open-air laboratory for participants to learn hands-on methods for preserving earthen buildings and archaeological sites. Al Ain, known as the “Garden City” of the UAE, is a UNESCO World Heritage Site with a five-thousand-year history of settlement in oases, archaeological sites, and buildings constructed with earth. Sites visited by course participants included Al Jimi and Al Qattara Oases and Hili Archaeological Park. On a trip to Oman, the group carried out an exercise on the conservation of urban settlements made of earth in Nizwa's Al Aqr



Participants in the fall 2022 International Course on the Conservation of Earthen Architecture, at Al Ain, UAE. Photo: Department of Culture and Tourism, Abu Dhabi.

neighborhood, an ancient, fortified city built with earthen bricks.

Through site visits, lectures, discussions, laboratory sessions, demonstrations, and field exercises, participants learned fundamental theories of conservation, as well as practical methods for conserving earthen sites. Group fieldwork provided course members with the chance to address actual work scenarios where multidisciplinary solutions and collaboration are required. The twenty participants came from thirteen countries: Algeria, Bangladesh, Ecuador, Egypt, India, Kuwait, Morocco, Nepal, Oman, Saudi Arabia, Spain, the UAE, and the US.

The first International Course on the Conservation of Earthen Architecture organized by the GCI and the DCT was held in 2018 in Abu Dhabi and Oman. That course and the latest one are part of the Institute's Earthen Architecture Initiative. Despite its long history and widespread use, earthen architecture confronts many threats to its preservation. In the Middle East and North Africa, earthen buildings face abandonment and population displacement, earthquakes, and climate change. Unreinforced buildings made of earth are extremely vulnerable to earthquakes, subject to weakening and even collapse, especially if poorly maintained. Similarly, climate change and erratic weather events such as monsoons and floods are especially destructive to earthen structures and settlements. To address these issues, the GCI's Earthen Architecture Initiative seeks to advance earthen architecture conservation through model projects, research, capacity building, and dissemination of information for appropriate conservation interventions on historic buildings, settlements, and archaeological sites composed of earthen materials.

PROTECTIVE SHELTERS AT NEA PAPHOS

In June 2022, after extensive deliberations by a jury of outside experts in conservation, archaeology, architectural design, and structural and environmental engineering—along with representatives from the GCI and the Department of Antiquities of Cyprus (DoA)—Hugh Broughton Architects was named the winner of an international competition to design protective shelter prototypes for ancient mosaics at the UNESCO World Heritage Site of Nea Paphos in Cyprus.

Since 2018 the GCI and the DoA have been developing a conservation and management plan to guide the preservation of Nea Paphos, a site rich in mosaic pavements of the Hellenistic, Roman, and early Christian periods, as well as Frankish and Ottoman monuments. Construction of protective shelters is imperative to protect and present the mosaic pavements and other excavated remains for the future.

The detailed design brief for the competition—developed by the GCI and the DoA with international specialists in conservation and protective shelters—included numerous requirements: most critically, to ensure the protection of the fragile remains from human and environmental threats; to connect the design to the site and setting; to create conditions for viewing the mosaics and facilitating circulation of visitors; and to use sustainable materials and systems. The short-listed firms visited Nea Paphos with the DoA and other experts to help conceptualize their prototypes.

The evaluation of the concept designs by the jury found Hugh Broughton Architects' approach to a shelter prototype the most comprehensive and well-balanced response to the complex criteria established by the design brief,

with priority given to protection of the mosaics. The structural design with its column-free interior and innovative surface-bearing foundations minimizes physical impact on the archaeological fabric, while providing protection from seismic, wind uplift, and tsunami hazards.

MCE WORKSHOP AND PANEL

At the end of 2022 the GCI's Managing Collection Environments Initiative—which seeks to address outstanding issues and questions related to the sustainable care and management of collection environments—organized activities in conjunction with two conferences involving the registrar community. These activities are part of the Initiative's efforts to increase the dialogue between registrars and conservators.

On November 5, 2022, GCI staff Cecilia Winter and Vincent Laudato Beltran conducted a two-part workshop, "Evaluating Risks, Monitoring, and Analyzing Data of Art in Transit," at the 12th European Congress of Registrars in Strasbourg, France. The initial session engaged the roughly thirty participants in a practical exercise on risk assessment for objects considered for loan. The registrars, in small groups, examined two case studies, analyzing the typical requirements for loans, and used a risk matrix to understand how they related to each other. This process can support more effective and sustainable allocation of resources based on the magnitude of each risk, which itself is based on frequency and the potential loss of value.

In the subsequent session, participants learned about the range of sensors currently used by cultural heritage institutions to monitor transit environments and how analysis of this data supports decision-making. The participants were also introduced to two preventive conservation analysis tools: the GCI Excel Tools extend the typical analysis and visualization of temperature and relative humidity data using ubiquitous software, while HERIE informs about the risk of physical damage to various object types when transitioning between environments. The animated discussions during the workshop indicated a demand among the registrar community for this information.

On December 9 at the 2022 Association of Registrars and Collections Specialists (ARCS) Virtual Conference, Cecilia Winter moderated the panel "Killing Flies with Sledgehammers—Loans and Sustainability." The panel sought to foster discussion about topics related to loans, an area of collection care where there is a noted discrepancy across research, policy, and practice, and where over-cautious practices often make

them less sustainable without necessarily lowering the risk to collections. MaryJo Lelyveld, manager of conservation at the National Gallery of Victoria in Melbourne, Australia, gave a presentation on temperature and relative humidity specifications for loans. Cayetana Castillo, associate vice president of collections & loans at the Art Institute of Chicago, discussed the increasing implementation of virtual courier practices. The panel also included Matthew J. Eckelman, associate professor of environmental engineering at Northeastern University in Boston, and Sarah Nunberg, Pratt adjunct associate professor and principal investigator at Sustainability Tools in Cultural Heritage, both of whom talked about how life cycle assessments have been used to help guide collection care professionals in making more sustainable decisions related to loan procedures.

Recent Events

TUT CENTENNIAL CELEBRATIONS

November 2022 marked the hundredth anniversary of the discovery of the Tomb of Tutankhamun in Egypt. To celebrate the centennial, the American Research Center in Egypt (ARCE) and the Egyptian Ministry of Tourism and Antiquities organized an international conference in Luxor as well as various special events, including a gala dinner at Luxor Temple.

The conference featured speakers from a range of disciplines who presented papers on various aspects of Tutankhamun's history as well as his tomb and the artifacts it contained. Jeanne Marie Teutonico, GCI Associate Director, gave a presentation that summarized the GCI's decade-long collaboration with the Egyptian heritage authorities to study and document the tomb, conserve its wall paintings, create a new environmental management system, and upgrade the tomb's infrastructure for the better protection of the paintings and the comfort of visitors. The conference and gala events were also attended by GCI team members Lori Wong, who directed the wall paintings conservation; Sara Lardinois, who was responsible for the infrastructure improvements and new lighting design; and consultant Hany Hussein of Helio Scientific, who worked with the GCI to design maintenance protocols for the new ventilation system and the continued monitoring of the tomb environment. The proceedings of "Transcending Eternity: The Centennial Tutankhamun Conference" will be published

in a special volume of *Annales du Service des Antiquités de l'Égypte* (ASAE).

The return to Egypt for the Tut centennial also provided an opportunity for the GCI team to evaluate the condition of Tutankhamun's tomb since the project's conclusion in 2019 and to service the ventilation and environmental monitoring systems. As tourism in Egypt rapidly returns to pre-pandemic levels, it is especially important to evaluate the effectiveness of the environmental management system in maintaining stable conditions in the tomb.

The team also visited the Tomb of Nefertari in the Valley of the Queens—the site of the GCI's first field project—to plan for a spring 2023 campaign, which will focus on a thorough condition survey of the tomb's wall paintings and infrastructure modifications that will improve safety and better protect the wall paintings.

MEETING ON ARTIFICIAL INTELLIGENCE

In July 2022 the GCI hosted an experts meeting on the intersections of artificial intelligence and heritage science, in collaboration with Brent Seales—professor of Computer Science and director, Center for Visualization and Virtual Environments at the University of Kentucky—and the National Science Foundation (NSF). Titled "Fostering Collaborative Breakthroughs in Heritage Science through Machine Learning and Data Science," the meeting brought together approximately forty participants from both the computer science and the heritage spheres to explore emerging techniques in imaging, data science, and machine learning, and their applications to heritage objects and sites, with the goal of identifying priority research areas that might be funded by the NSF and others.

Discussions revolved around four main themes:

- **The Current Landscape:** What case studies represent successful, exciting work that shows the promise of ML/DS methods when applied to problems in Heritage Science?
- **Collaborations and Programs:** What programs and partnerships exist—or are needed—to encourage meaningful collaborations? How can we break down barriers to entry and build pathways for the next generation heritage scientist?
- **Infrastructure:** What equipment, tools, processes, and facilities currently exist or need to be created to provide "Next Generation Heritage Science" capabilities? How can we foster innovation and access?
- **Grand Challenges:** What problems or obstacles continue to hinder the study,

analysis, and discovery of heritage objects? Which of these areas offer the most promising, high-likelihood potential for AI-inspired breakthroughs in heritage science and, conversely, for heritage science-driven innovations in AI?

These themes, and the discussions generated by the expertise of the participants, revealed not only the promises of ML/DS-based approaches to heritage science, but also barriers preventing their use and diffusion. Key interactions and ideas from these discussions and presentations are being pulled together to inform a white paper on "Heritage Science through Machine Learning and Data Science" that will be delivered by the organizers.



Participants in the Greener Solvents in Art Conservation panel in Brussels, December 2022. Photo: KIK-IRPA, Lionel Dutrieux.

MEETING ON GREENER SOLVENT USE

On December 13–14, 2022, in Brussels, Belgium, the GCI's Michael Doutre, SiC's Gwendoline Fife, and KIK-IRPA's Francisco Mederos-Henry organized an experts panel on the theme "Greener Solvents in Art Conservation." The meeting brought together fourteen professionals working in conservation, green chemistry, industrial chemistry, and sustainability to create a common understanding of key concepts, research priorities, and workable approaches to lessening the harmful effects of solvent use in the cultural heritage field. Among the understandings of greener solvent use in conservation agreed upon at the gathering were:

- Conservators must be empowered by knowledge, skills, and values as well as be instilled with a heightened awareness to implement greener solvent choices.
- Solvent use in conservation must be changed to benefit the health and safety of the conservator and environment.
- All solvent use carries costs: toxicological, environmental, and financial. Minimizing the amounts of solvents used and maximizing the benefit of their use reduce these costs.

- Choose solvents as nontoxic to the conservator as possible. It is important to stay informed on the latest health information for solvents in use.
- Choose solvents that pollute the environment minimally and break down into non-harmful products. Some solvents carry lower environmental costs through greener manufacturing, less transportation, or other means.

The meeting's findings will form the basis of a publication focused on what it means to be "greener" in the context of conservation treatments.

WILLIAMSON COLLECTION NOW OPEN TO RESEARCHERS

In 2019 Colin Williamson, a technologist in the polymer raw material and additives industry and an authority on the manufacture and development of early plastics, donated to Getty a unique collection of research materials. His donation included objects, books, journals, technical reports, trade papers, industry marketing materials, and gray literature on plastics and the plastics and rubber industries.

Williamson—who is deeply involved in the conservation issues of plastic objects in collections—joined the plastics industry in 1969 as a colorist and additives specialist. In 1971 he began collecting early plastics and rescued many archival records of organizations active in the production of plastics and rubber, including Imperial Chemical Industries and the Rubber and Plastics Research Association of Great Britain. In the 1980s he focused on the environmental and historical aspects of plastics. He has lectured internationally on plastics history, design, technology, business, and environmental impacts, and made public appearances on television and radio as a plastics expert. He also has served as a consultant to the GCI's Preservation of Plastics project. His donation contributes to the research supporting this work and complements other collections acquired by the GCI, such as the Andreas Color Chemistry Library Collection.

With the help of GCI graduate intern Meg Suhosky, who worked with the GCI Information Center and Getty Library staff to arrange and organize the donation, the Colin Williamson collection of plastics trade literature is now open for use by qualified researchers. The finding aid to the collection can be accessed at <http://hdl.handle.net/10020/cifa2022m8>. In addition, many of his donated books are now available for use and can be found in the Getty Library catalog at <https://primo.getty.edu>.

GCI LABORATORY RENOVATION UPDATE

The renovation of the GCI Science laboratories is now over halfway done, with an anticipated July 2023 completion date. Demolition of the laboratories in the East Building began in July 2022, while work in the Technical Studies Research laboratory in the Museum Building started in November 2022. The goal of the project is to greatly enhance the scientific research capabilities of the GCI and to increase lab visibility for visitors.

In the East Building laboratories, terrazzo flooring has been installed, and by late spring major mechanical, electrical, and plumbing systems should be mostly complete. Window framework has been erected in the corridors, and structural supports have been positioned for the glass walls that will provide visual connection between the lab spaces. Work in the Museum Building laboratories is not far behind. Most finishes for all spaces have been finalized, and the fabrication and placement of millwork, such as workstations, will be completed prior to move-in. Selection and purchase of furniture, including lab worktables, conference room tables, and chairs is underway. New and upgraded walk-in and freestanding environmental chambers have arrived and will be situated on L3 of the East Building before the July completion date, when the laboratories will be repopulated with additional analytical instrumentation, both preexisting and more recently acquired. The final phase of the project will include system commissioning, testing, and training.

The GCI looks forward to reinhabiting the more functional and open laboratory spaces in late summer, utilizing state-of-the-art instrumentation, and again facilitating tours for Getty colleagues and outside visitors.

Tributes

VALERIE GREATHOUSE (1946–2023)

Valerie Greathouse, who was a member of the GCI's Communications and Information Center staff for nearly thirty-four years, passed away on January 8, 2023.

Born and raised in Los Angeles, Valerie became a bibliophile at an early age, with a passion for archaeology sparked by reading a children's magazine article about Tutankhamun. After earning a BA in psychology from UCLA, she took a research position there in mental



Photo: Courtesy of the family of Valerie Greathouse.

health evaluation and entered the School of Public Health's master's program. Her master's research in behavioral sciences and education involved the retrieval, analysis, and dissemination of evaluation information. She also managed a UCLA research grant and supervised an abstracting and indexing unit. Subsequently, her work included research and training in information retrieval, consulting in information management systems and database design, and marketing of information systems and services.

Valerie began her tenure at the GCI in 1989 as an assistant editor of AATA, then still a print publication on the cusp of becoming searchable online. To that end, she worked on the first iteration of the Conservation Thesaurus and the AATA/Bibliographic Database of the Conservation Information Network. From AATA, she joined the staff of the GCI's Information Center, where she became a mainstay of the operation and helped make it the invaluable resource it is today. Her consistent determination to assist Getty staff and outside researchers with whatever they needed was legendary, and the GCI projects and publications to which she contributed are far too numerous to count. She provided literature searches and bibliographic instruction, suggested concepts for research strategies, and edited and reviewed countless bibliographic citations. Through her work helping others, she became knowledgeable on a wide range of topics, from rock art to modern paints. One of her many proud accomplishments was co-compiling and editing the publication *David Alfaro Siqueiros: Murals in Los Angeles*, a selected bibliography whose second edition was published in 2016.

Valerie loved the Getty and was dedicated to the GCI to her core. Her many colleagues and friends at the Institute and beyond will remember her for her humor, tenacity, enthusiasm, curiosity, exceptional research skills, and the quick can-do attitude she brought to all requests made of her, no matter how arcane or obscure. She will be greatly missed.

Our condolences go out to Valerie's husband Stewart and her daughter Kelsey.



Photo: The Getty Conservation Institute.

WILLIAM S. GINELL (1923–2022)

William S. Ginell, who was a member of the GCI’s Science department for nearly twenty years, passed away at the end of July 2022.

While Bill Ginell devoted the last part of his working life to conservation, his first work experience—following his 1943 graduation from Brooklyn Polytechnic Institute with a degree in chemistry—was as part of the secret Manhattan Project at Columbia University developing the atomic bomb. He went on to get a PhD in physical chemistry from the University of Wisconsin and ultimately spent twenty-six years working for aerospace firms in California, where 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.

After a year of consulting for the Getty on conservation issues, he joined the embryonic GCI in 1984, helping design the laboratories at the Institute’s first home in Marina del Rey. Early on 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 nondestructive method for determining subsurface defects in stone. Later, he was involved in helping to determine an acceptable storage environment for the Dead Sea Scrolls. While serving as the head of GCI Science’s Architecture and Monument Conservation Research, Bill led extensive multiyear research into the seismic strengthening of adobe and stone structures, studies that continue today with the Institute’s Seismic Retrofitting Project.

As a materials scientist with lengthy experience in industry, Bill sought to facilitate the transfer of industrial techniques to conservation, carefully evaluating their effectiveness. Because of the diversity of materials used in the creation of cultural heritage, Bill found himself involved in a greater range of scientific issues than earlier in his career. The challenge was one he embraced with enthusiasm. According to his daughter Carolyn, Bill “loved every minute of being part of the Institute all through the years—he felt it was the crowning achievement of his professional life.”

Bill certainly helped shape the first decades of the GCI’s scientific work, and those who had the opportunity to work with him will remember with appreciation his dedication to his second career, his intellectual engagement, and his generosity as a colleague.

GIONATA RIZZI (1961–2022)

The world of heritage conservation lost a dear friend, talented designer, and inspirational teacher with the passing of Gionata Rizzi in August 2022. A preservation architect of refined skills and sensibilities, Gionata made significant contributions to the work of the GCI and the Getty Foundation over the last two decades.

Gionata graduated in architecture from Milan Polytechnic and earned a master’s degree in building conservation through the joint program of ICCROM and the Institute of Advanced Architectural Studies in York, England. While in London, he discovered Bernard Feilden’s *Conservation of Historic Buildings* at the Architectural Association’s bookshop; shortly thereafter, he was working for Sir Bernard in India, and his international career was launched.

In subsequent years, Gionata was consultant to numerous conservation organizations. For the ARCH Foundation, UNESCO, the World Monuments Fund, and ICCROM, he worked on buildings and archaeological sites in Bahrain, Croatia, France, Jordan, Lebanon, Pakistan, Syria, and other locations. Many projects involved the stabilization, protection, and presentation of complex World Heritage Sites, among which the restoration of the Temple of Our Lady of Guadalupe in Spain received a Europa Nostra award.

Some of Gionata’s most notable projects involved the design of shelters for archaeological sites. His two experimental shelters at the Insula Orientalis for the Herculaneum Conservation Project combine practical and cost-effective protection with a subtle interpretation of the architectural context. For the GCI, Gionata devised an innovative and beautiful tent structure for the Hieroglyphic Stairway in Copán, Honduras, and a shelter design for the Roman mosaics at Bulla Regia in Tunisia. His recently executed shelters for the Villa Romana del Casale in Piazza Armerina, Sicily, show the same sensitivity to both preservation concerns and the meaning and logic of the historic environment. In addition to project work, he served for four years on the architectural conservation grants committee of the Getty Foundation. He taught at Milan Polytechnic, at the University of Geneva, on the GCI-ICCROM stone courses



Photo: Jeanne Marie Teutonico.

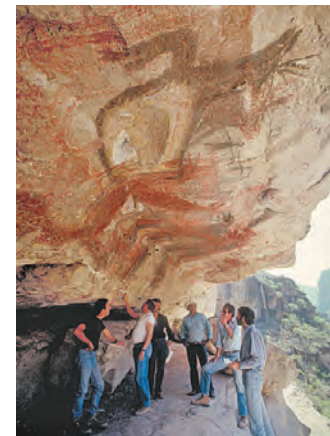
in Venice and Rome, and at the University of Pennsylvania.

Gionata will be remembered for his ebullient nature, infectious enthusiasm, and deeply held belief in conserving the past for future generations. A profoundly creative conservation architect who never lost sight of the beauty and significance of the places in his care, he will be sorely missed by the many friends and colleagues who were privileged to work with him.

GUILLERMO ALDANA (1937–2022) AND JOHN C. LEWIS (1956–2022)

Last year saw the passing of two gifted freelance photographers who meaningfully contributed to GCI projects through their images.

Guillermo Aldana—born in El Rosario, Sinaloa, Mexico—photographed extensively in his home country and elsewhere. His work appeared not only in Mexican publications, but also in European and American ones, including *National Geographic*. On behalf of the GCI, Guillermo traveled around the world, photographing places and sites related to the work of the Institute. These included the tomb of Nefertari in Egypt, various locales in Mexico (among them the rock art in Baja California), the Maya site of Xunantunich in Belize, the hominid footprints at Laetoli in Tanzania, the historic city of Quito in Peru, sites in several Asian countries, and Mediterranean sites in preparation for the Getty-organized 1995 conference, “The Conservation of Archaeological Sites in the Mediterranean Region.” Guillermo’s images were used repeatedly and extensively in the early years of the Institute. His energy and passion for his work was infectious.



The rock art site of Cueva Pintada, Baja California, Mexico, in 1988. Photo: Guillermo Aldana, for the GCI.

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Mary Leakey in 1996 talking with local Maasai tribeswomen during a meeting to discuss the GCI's Laetoli conservation project. Photo: John C. Lewis, for the GCI.

John C. Lewis, based near Los Angeles, began working professionally in photography in the early 1980s. In addition to commercial work, he engaged in fine art, social documentary, and urban landscape photography, and a number of his images are in the collection of the J. Paul Getty Museum. For the GCI, John traveled to Benin to photograph the Institute project to conserve the royal bas-reliefs of Abomey, and to Laetoli to photograph one of the GCI campaigns at the site. In addition—and significantly—he did extensive work in Los Angeles itself, photographing historic places and neighborhoods as part of the Institute's work with the City of Los Angeles on the Los Angeles Historic Resource Survey Project. John's quiet and gentle humanistic approach to his work is evoked in many of his images.

The GCI was fortunate to have been able to call upon the talents of both photographers to help in our work to promote the conservation of our cultural heritage, and we are saddened by their passing.

Print & Online Publications

Print publications are available for purchase at shop.getty.edu. Online publications are available for free at getty.edu/conservation.

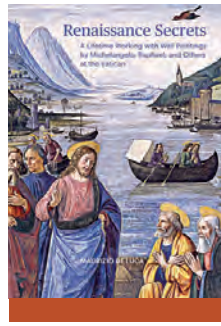
PRINT

Renaissance Secrets: A Lifetime Working with Wall Paintings by Michelangelo, Raphael, and Others at the Vatican

Maurizio De Luca

Translated by Jason Cardone

Renaissance Secrets offers a close-up “view from the scaffolding” of some of the greatest Renaissance wall paintings at the Vatican. Expert restorer Maurizio De Luca spent his forty-year career in the Vatican Museums, including fifteen years as head restorer of the Painting Restoration Laboratory. He personally oversaw



some of the most important restorations of the last half century, including wall paintings by Perugino, Botticelli, and others on the walls of the Sistine Chapel; the Pintoricchio wall paintings in the Borgia Apartments; the Raphael Rooms; and the last two frescoes by Michelangelo, in the Pauline Chapel at the Apostolic Palace.

In this engaging and copiously illustrated book, De Luca conveys the kind of knowledge that can only be derived from close personal observation. The reader is offered an intimate perspective that illuminates the challenges, choices, and techniques of each artist and demonstrates how the conservation process enriches understanding and interpretation of these iconic works.

Maurizio De Luca was head restorer at the Painting Restoration Laboratory at the Vatican Museums at the time of his retirement in 2010. Jason Cardone is an adjunct professor at the American University of Rome.

PRINT

Roy Lichtenstein: Outdoor Painted Sculpture

Julie Wolfe, with contributions by Clare Bell and technical analysis by Alan Phenix and Rachel Rivenc

Vibrant color was essential to the paintings of the American pop artist Roy Lichtenstein (1923–1997), and when he began exploring the creation of outdoor sculpture in the late 1970s, vivid hues remained an important part of his artistic vocabulary. Today, preserving these remarkable works after they have endured decades in outdoor environments around the world is an issue of pressing concern. This abundantly illustrated volume is based on extensive archival research of Lichtenstein's studio materials, interviews with his assistants, and a thorough technical analysis of the sculpture *Three Brushstrokes*. The book concludes with a chapter showing various options for the care, conservation, and restoration of his sculptural works, making this an essential resource for conservators, curators, and others interested both in the iconic artist and modern sculpture in general.

Julie Wolfe is a conservator of decorative arts and sculpture at the J. Paul Getty Museum.

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Conservation Perspectives, The GCI Newsletter is distributed free of charge twice a year to professionals in conservation and related fields and to members of the public concerned about conservation. Back issues of the newsletter, as well as additional information regarding the activities of the GCI, can be found in the Conservation section of the Getty's website, getty.edu/conservation.

The Getty Conservation Institute (GCI) works internationally to advance conservation practice in the visual arts—broadly interpreted to include objects, collections, architecture, and sites. The Institute serves the conservation community through scientific research, education and training, field projects, and the dissemination of information. In all its endeavors, the GCI creates and delivers knowledge that contributes to the conservation of the world's cultural heritage.

The GCI is a program of the J. Paul Getty Trust, a cultural and philanthropic institution dedicated to the presentation, conservation, and interpretation of the world's artistic legacy.



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For more information about the work of the GCI, see getty.edu/conservation and



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The regional pavilions at the Centre International du Commerce Extérieur du Sénégal. Designed by architects Jean-François Lamoureux and Jean-Louis Marin in the 1970s, this series of triangular buildings with exquisite architectural detailing is a preeminent example of postindependence African modernism. Photo: Federico Pardos.



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