The Getty Conservation Institute works internationally to advance conservation practice in the visual arts—broadly interpreted to include objects, collections, architecture, and sites. The GCI serves the conservation community through scientific research, education and training, model field projects, and the dissemination of the results of both its own work and the work of others in the field. In all its endeavors, the GCI focuses on the creation and delivery of knowledge that will benefit the professionals and organizations responsible for the conservation of the world's cultural heritage.

Cover:
Salk Institute, La Jolla, California (1962-67, Louis Kahn)
Photo: Gail Ostergren, ©2013, J. Paul Getty Trust
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Among the primary aims of the Getty Conservation Institute’s Conserving Modern Architecture Initiative (CMAI) is the production of publications and resources that will assist in advancing this field of conservation. In the first edition of *Conserving Twentieth Century Built Heritage: A Bibliography*, published in the fall of 2011, the editors committed to updating the publication periodically in order to capture the most current literature in this rapidly growing area of conservation practice. To that end, the GCI is pleased to release this second edition, which captures materials published since 2011, as well as a number of older works that were omitted from the first edition. The structure of this document follows the original, with minor revisions to some of the chapter titles to better reflect content.

We are also pleased to announce that in addition to the published version, the bibliography is searchable on the GCI’s Abstracts of International Conservation Literature (AATA) Online. It can be found on the browse tab, along with other GCI project bibliographies at [http://aata.getty.edu/Browse](http://aata.getty.edu/Browse). The first edition of the bibliography will be available on AATA until January 2014, when it will be replaced by this revised edition.

Special thanks go to Anna Duer, GCI Research Assistant, for her efforts in compiling the bibliography, and to Ana Paula Arato Gonçalves for her assistance reviewing the new entries. We are also thankful for the comments and suggestions submitted by users of the first edition, which have been incorporated here as appropriate. The CMAI welcomes further comments to help us improve future versions. Please email them to [CMAI@Getty.edu](mailto:CMAI@Getty.edu).
CHAPTER 1

Introduction to the Bibliography

One of the objectives of the Getty Conservation Institute (GCI)’s Conserving Modern Architecture Initiative (CMAI) is to produce key texts that address issues critical to the conservation of modern architecture. To commence this work, the GCI has prepared Conserving Twentieth-Century Built Heritage: A Bibliography as a resource for conservation practitioners working with twentieth-century built heritage. This bibliography includes texts of international, national, and regional significance, but does not seek to be fully comprehensive at a global level and generally excludes highly localized guides or product documents. It is organized as a subject bibliography and is structured so that users can easily expand upon it as needed to include specific local references or additional subject categories (such as twentieth-century landscape architecture design). This bibliography is focused on English-language literature pertaining to the conservation of twentieth-century buildings and structures, although a few non-English-language texts that contain abstracts in English have been included.

This work builds upon earlier bibliographies including those that appeared in:


Some of the bibliographies cited above may initially appear to be more extensive than the present work. When conservation of twentieth-century heritage first started to gain momentum, very limited literature was available on the subject. The bibliographies produced within the English Heritage volumes, for example, captured as many documents as could be identified at the time. Since the mid-1990s, there has been considerably more scholarship on this issue resulting in a number of conference proceedings, articles, and books. The GCI has sought to incorporate this more recent literature, while excluding many of the editorials and short journal commentaries that were present in the earlier volumes.
**Structure of the Bibliography**

The bibliographic references in *Conserving Twentieth-Century Built Heritage* fall into two major subject categories—history and background on twentieth-century built heritage (chapter 2) and conservation of twentieth-century built heritage (chapters 3-5). The body of the bibliography is organized in four chapters. These are:

**History and Background** (chapter 2) lists texts that provide general background, history, and criticism on twentieth-century buildings and structures. It includes both key texts from the period and later texts that assess twentieth-century structures.

**Conserving Twentieth-Century Buildings and Structures** (chapter 3) includes texts on issues specific to the conservation of twentieth-century built heritage, including identification, documentation, and protection, as well as conservation case studies. Also included are texts on the theoretical and methodological framework for conserving twentieth-century heritage.

**Conservation of Specific Construction Materials and Systems** (chapter 4) contains references to texts describing the conservation of specific twentieth-century construction materials, building components, and construction types. This chapter is organized in a series of subchapters as follows:

- General Material Conservation Issues
- Cladding Materials (tile, terracotta, mosaic, and others)
- Concrete and Cast Stone
- Construction Systems (prefabricated systems, curtain walling, and others)
- Finishes and Paints
- Flooring
- Glass, Glazing, and Windows
- Masonry
- Metals
- Plastics
- Roofing
- Wood

**Sustainability and Adaptive Reuse** (chapter 5) provides references to texts, guides, and case studies that explain principles or provide examples of adaptive reuse, as well as energy conservation, sustainable practices, and mechanical services in twentieth-century buildings and structures.
The appendix provides descriptions of a number of national and international organizations with programs specializing in the identification, promotion, or conservation of twentieth-century heritage, or that produce relevant serial publications. It is intended to direct readers toward additional sources of information. Also included are links to several comprehensive abstracted databases of conservation literature.

Future Steps

The GCI will update this bibliography periodically and is soliciting input on both content and structure from professionals working in the field. We are especially interested in broadening the selection of references related to sites and conservation methodologies beyond the North American, European, and Australian contexts and from non-English-language publications. We would also like to broaden the scope of resources listed in the appendix. To help us improve future versions, please email your comments and suggestions to us at CMAI@Getty.edu.
CHAPTER 2

History and Background on Twentieth-Century Built Heritage


History and Background on Twentieth-Century Built Heritage


Landmark Media. 2000. *Architecture in Profile*. Melbourne, Australia; Falls Church, VA: Discovery International; Landmark Media, Inc.


CHAPTER 3

Conservation of Twentieth-Century Buildings and Structures


Ambrogio, Keoma, Annalisa Conforti, and Rita Fabбри. 2007. Il consolidamento dei materiali moderni tra conservazione e sostituzione: Un problema di restauro o di manutenzione ordinaria? [The consolidation of modern materials between conserva-


Conservation of Twentieth-Century Buildings and Structures


Conservation of Twentieth-Century Buildings and Structures


Findlay, Michael. 2007. Right up to date: Unloved and unromantic they may be, but more recent buildings earn a place in our heritage. *Heritage New Zealand* (104): 47-49.


Conservation of Twentieth-Century Buildings and Structures


———. 2006. La casa-studio di Konstantin Mel’nikov a Mosca [Konstantin Mel’nikov’s house-studio in Moscow]. *Arkos: Scienza e restauro dell’architettura* 7 (16): 28-35.


Grignolo, Roberta, and Bruno Reichlin, eds. 2012. *Lo spazio interno moderno come oggetto di salvaguardia = Modern Interior Space as an Object of Preservation*. Mendrisio; Cinisello Balsamo, Milano: Mendrisio Academy Press; Silvana.


Conservation of Twentieth-Century Buildings and Structures


Kreyling, Christine. 2006. 50 and proud of it: Standards for preservation are changing to take account of modern treasures. Planning 72 (10): 6-7,9-11.


———. 1995. I can’t see it; I don’t understand it; and it doesn’t look old to me. *Historic Preservation Forum* 10 (1): 6-15.


———. 2003. 20th century heritage: Recognition, protection and practical challenges. In 
Heritage at Risk: ICOMOS World Report 2002/2003 on Monuments and Sites in Danger = 
Patrimoine en péril: ICOMOS rapport mondial 2002/2003 sur des monuments et des sites en 

———. 2004. The real thing: Authenticity, heritage significance and conservation. In The 

———. 2004. Twentieth-century heritage: Recognition, protection, and practical chal-

———. 2007. Harry Seidler and the legacy of modern architecture in Australia: An inter-

Machado, Lucio Gomes. 1999. São Paulo and Brasilia: Managing the authenticity of the 
twentieth century heritage. In Proceedings of the Interamerican Symposium on 
Authenticity in the Conservation and Management of the Cultural Heritage of the 
Americas: San Antonio, Texas, March, 1996, edited by Gustavo Araoz, Margaret 
ICOMOS; Getty Conservation Institute.

Mackie, Lindsay, and Edwin Tate. 1994. Shrines of the times. Perspectives on Architecture 

Mantelli, Roberta, and Michela Ravera. 2004. La manutenzione in un edificio anni ‘60: 
Esame delle nuove soluzioni tecniche e riflessioni sugli esiti dei precedenti interventi 
[Maintenance of a 1960s building: Study of new technical solutions and reflections on 
the success of past interventions]. In Architettura e materiali del Novecento: 
Conservazione, restauro, manutenzione: Atti del Convegno di studi, Bressanone 13-16 
luglio 2004, edited by Guido Biscontin and Guido Driussi, 1071-77. Scienza e beni 

Marchetti, Luciano, Alessandro Ferretti, and Maria Piccarreta. 2004. Le architetture di 
Mario Ridolfi in Umbria: Un tentativo di superare i limiti della norma per garantire la 
tutela dell’architettura contemporanea [Mario Ridolfi’s architecture in Umbria: An 
try to overcome the norms to guarantee laws that protect contemporary architec-
ture]. In Architettura e materiali del Novecento: Conservazione, restauro, 
manutenzione: Atti del Convegno di studi, Bressanone 13-16 luglio 2004, edited by 
Guido Biscontin and Guido Driussi, 131-39. Scienza e beni culturali 20. Marghera-
Venezia: Arcadia ricerche.

= Into the World with the Cultural Heritage: Museology, Conservation, Architecture. 
Zagreb: Petrinja.

Marsden, Susan, and Fran Stropin, eds. 2001. Twentieth Century Heritage: Marking the 

20th Century Heritage: Our Recent Cultural Legacy: Proceedings of the Australia 

House Complex: A Restoration Project: For Art’s Sake and Beyond. Buffalo, N.Y.: 
Martin House Restoration Corp.


Conservation of Twentieth-Century Buildings and Structures


Sh¢t¢glt¢s, M¢rgarit¢. 2008. Erich Mend¢l¢sohn’s R¢d Bann¢r fann¢ty and Sain¢ P¢t¢r¢burg’s industrial architecture. Futur¢ A¢n¢¢¢ri¢¢¢: Journ¢l o¢ Histo¢c Pr¢serv¢ti¢n Hi¢t¢ry, Th¢ori¢ and Criticism 5 (1): 28-37.


Stevens, Kimberly. 2003. Making a case: Modern houses have regained their popularity, but a lack of protection keeps the bulldozers circling. Architecture 92 (2): 35-36,[108].


Conservation of Twentieth-Century Buildings and Structures


CHAPTER 4

Conservation of Specific Twentieth-Century Construction Materials and Systems

4.1 General Material Conservation Issues


4.2 Cladding Materials (tile, terracotta, mosaic, and others)


4.3 Concrete and Cast Stone


Australian Concrete Repair Association (ACRA), Commonwealth Scientific and Industrial Research Organisation (CSIRO), and Standards Australia. 2006. *Guide to Concrete Repair and Protection*. 2nd ed. SAA HB 84-2006. Sydney: ACRA; CSIRO; Standards Australia.

Bell, Joseph N. 1969. *From the Carriage Age ... To the Space Age ... The Birth and Growth of the Concrete Masonry Industry*. Arlington, Va.: National Concrete Masonry Association.


Bianco, Alessia. 2004. Impiego delle PnD per la valutazione delle risorse dell’edilizia storica in calcestruzzo armato: Il caso dell’edilizia in “muratura confinata” dei primi del novecento a Reggio Calabria [The use of nondestructive testing for the evaluation of the resources of historic buildings in reinforced concrete: The case of buildings with “confined masonry” from the early 1900s in Reggio Calabria]. In *Architettura e mate-


Concrete and Cast Stone


Goold, Jamie, Paul Murray, and Scott Steedman. 2006. *How Did They Build That?* Program 9, Concrete Spaces. ca. 30 min. Aberdeen, WA: Shopware.


Concrete and Cast Stone


Newlon, Howard, and American Concrete Institute. 1976. A Selection of Historic American Papers on Concrete, 1876-1926. 1st ed. SP-52. Detroit: American Concrete Institute.


Precast/Prestressed Concrete Institute. 1989. *Architectural Precast Concrete*. 2nd ed. Chicago, Ill.: Precast/Prestressed Concrete Institute.

Precast/Prestressed Concrete Institute Architectural Precast Concrete Services Committee, and Precast/Prestressed Concrete Institute Plant Certification Committee. 1996. *Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products*. 3rd ed. Chicago, IL: Precast/Prestressed Concrete Institute.


4.4 Construction Systems (prefabricated systems, curtain walling, and others)


4.5 Finishes and Paints


4.6 Flooring and Paving


4.7 Glass, Glazing, and Windows


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Glass, Glazing, and Windows


4.8 Masonry


4.9 Metals


4.10 Plastics


4.11 Roofing


4.12 Wood


CHAPTER 5

Sustainability and Adaptive Reuse


Appendix: Organizations and Additional Resources

AATA Online: Abstracts of International Conservation Literature
A database providing free abstracts of conservation-related material published in 150 professional journals and conference proceedings. The database currently includes over 130,000 abstracts, with some 4,000 being added each year. It covers conservation of all materials in all time periods. This bibliography is searchable on AATA online.
http://aata.getty.edu/nps

Art Deco News.Com
This online resource on art deco news, issues, events, products, and destinations also provides links to international state and local art deco societies.
http://www.artdeconews.com/index.htm

Association for Preservation Technology International (APT)
While not specific to the twentieth century, APT is an invaluable resource for conservation-related materials, including the APT Bulletin and APT Communiqué (an electronic newsletter for members). The association held a number of conferences during the 1990s specifically addressing this topic. The Technical Committee on Modern Heritage is one of APT’s four dedicated subcommittees.
http://www.apti.org

BCIN: Bibliographic Database of the Conservation Information Network.
This bibliographic database covers the conservation and restoration of cultural property, including built heritage. An international collaboration, it contains citations from technical reports, conference proceedings, journal articles, books and audiovisual and unpublished materials and is searchable in both English and French.
http://www.bcin.ca/English/home_english.html

International Committee for Documentation of Buildings, Sites and Neighbourhoods of the Modern Movement (DOCOMOMO International)
DOCOMOMO International is an interdisciplinary organization that acts as a watchdog for important modern movement buildings, works to raise awareness of this heritage, and supports the exchange of information about its conservation and history. DOCOMOMO International’s nearly sixty chapters represent countries in Europe, the Americas, Asia, Oceania, and Africa. Dissemination and research activities include seminars, meetings, and organization of a biennial conference, as well as publications, including the DOCOMOMO Journal (and its predecessor, the DOCOMOMO Newsletter), and conference
and seminar proceedings. This bibliography contains citations for DOCOMOMO’s technology dossiers, proceedings, and select issues of the journal; many of these citations are listed under the organization’s previous name, International Working Party for Documentation of Buildings, Sites and Neighbourhoods of the Modern Movement. The organization also maintains the DOCOMOMO International Register documenting significant examples of modern movement heritage and a listing of endangered sites and structures. Selected listings from the International Register were published in 2000 in The Modern Movement in Architecture: Selections from the DOCOMOMO Registers (Dennis Sharp and Catherine Cooke, eds.).

http://www.docomomo.com/

DOCMOMO US
The United States chapter of DOCOMOMO maintains the DOCOMOMO US register, an online database of modern movement sites and buildings that parallels the goal of the International Register.

http://docomomo-us.org

English Heritage
Though devoted to the full range of heritage sites, English Heritage has conducted a number of activities focused on the identification, interpretation, and conservation of twentieth-century built heritage including the Contemporary Heritage and Character program, the postwar listing program of the 1990s, reviews of twentieth-century military heritage, and several publications.

http://www.english-heritage.org.uk/professional/research/landscapes-and-areas/characterisation/contemporary-heritage/

Getty Research Institute (GRI): Architecture and Design Collection
The GRI, a program of the J. Paul Getty Trust, is dedicated to furthering knowledge and advancing understanding of the visual arts. The GRI’s Architecture and Design Collection has significant holdings related to twentieth-century built heritage; materials are accessible to approved readers. Highlights include the archives of Southern California architects Pierre Koenig, John Lautner, Ray Kappe, Frank Israel, William Krisel, and Welton Becket; international projects by Coop Himmelblau, Peter Eisenman, Yona Friedman, Zaha Hadid, Philip Johnson, Daniel Libeskind, Aldo Rossi, Bernard Rudofsky, Lebbeus Woods, and Frank Lloyd Wright; the influential architectural photography of Julius Shulman and Lucien Hervé; and the papers of architecture critics Nikolaus Pevsner, Reyner Banham, and Ada Louise Huxtable.

http://www.getty.edu/research/special_collections/highlights/architecture_design/index.html

International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM): Conservation of Modern Architecture
ICCROM’s Built Heritage Programme has made the conservation of modern architecture a priority area. Activities have included international courses for heritage professionals to increase capacity in this field.

International Coalition of Art Deco Societies (IACADS)
ICADS is an international alliance of art deco societies that works to promote the appreciation and preservation of art deco works by educating the public and through cooperation and mutual support. Its World Congress on Art Deco is held biennially.
[http://www.icads.info](http://www.icads.info)

International Committee for the Conservation of the Industrial Heritage (TICCIH)
TICCIH is an international organization promoting research, conservation, documentation, and interpretation of the world’s industrial heritage. TICCIH publishes the journal, *Patrimoine de l’industrie / Industrial Patrimony*, as well as the quarterly *TICCIH Bulletin*, which is available online. The TICCIH International Inventory (online) documents significant industrial heritage sites. Though not limited in its time scope, much of TICCIH’s work deals with twentieth-century industrial heritage.
[http://www.mnactec.cat/ticcih](http://www.mnactec.cat/ticcih)

International Council of Monuments and Sites (ICOMOS) Heritage at Risk Program
The Heritage at Risk Program was created to gather and disseminate information about threatened heritage places worldwide, identify trends, and share potential solutions. The *ICOMOS World Report on Monuments and Sites in Danger* (an occasional series) contains short reports on risks in member countries or on thematic issues. Sites reviewed cover a range of heritage places and time periods, including twentieth-century built heritage.
[http://www.icomos.org/risk](http://www.icomos.org/risk)

International Council of Monuments and Sites (ICOMOS) International Scientific Committee on 20th Century Heritage (ISC20)
ICOMOS ISC20 is an international, multidisciplinary group that works to advance the identification, presentation, and conservation of twentieth-century heritage places. The committee informs and supports ICOMOS’s actions involving twentieth-century heritage, as well as working with other organizations internationally.
[http://icomos-isc20c.org](http://icomos-isc20c.org)

International Union of Architects (UIA)
The UIA—a global professional network of architects—maintains a searchable online index of architecture that exemplifies twentieth-century architectural history.
[http://www.archi.fr/UIA](http://www.archi.fr/UIA)

National Trust for Historic Preservation (NTHP)
The NTHP is a privately-funded nonprofit dedicated to preserving the USA’s historic places through advocacy, education and outreach. Among the organization’s many concerns is the preservation of modern movement and recent past resources. Information about these efforts can be found on their Modernism and the Recent Past webpage. The trust also owns and operates three significant modernist houses as historic sites.
Recent Past Preservation Network (RPPN)
The Recent Past Preservation Network is a national nonprofit (USA) advocating for the preservation of buildings of the recent past and providing resources to those who are working to do so. The Network publishes *RPPN Bulletin*, a free, quarterly, online newsletter, as well as a blog. Other web resources include the extensive “Historical Bibliography of Architecture, Landscape Architecture, and Urbanism in the United States since World War II” compiled by Richard Longstreth of George Washington University, a national wind-shield survey of recent past resources, and a resource directory.
http://www.recentpast.org/

Twentieth Century Society
The Twentieth Century Society advocates for the preservation of Great Britain’s architectural heritage from 1914 onward. The society publishes a scholarly journal, *Twentieth Century Architecture*, roughly once a year.
http://www.c20society.org.uk/

World Heritage Centre: Modern Heritage Programme
In 2001, UNESCO’s World Heritage Centre, ICOMOS, and DOCOMOMO launched a joint program for the identification, documentation, and promotion of nineteenth- and twentieth-century built heritage, which is underrepresented on the World Heritage List. In 2003, the WHC published *Identification and Documentation of Modern Heritage* (World Heritage Papers no. 5), which aims to provide a conceptual framework for identifying and analyzing modern heritage.
http://whc.unesco.org/en/modernheritage/

World Monuments Fund (WMF): Modernism at Risk Special Initiative
The WMF’s Modernism at Risk Special Initiative is focused on advocacy, public education, and conservation of threatened modern resources. WMF awards the Knoll Modernism Prize biennially for an innovative design solution that has resulted in the preservation or enhancement of a modern resource.
http://www.wmf.org/advocacy/modernism