

Notes on World Heritage and the Recent Past

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The World Heritage Convention

The "Convention Concerning the Protection of the World Cultural and Natural Heritage" (also known as the the World Heritage Convention) was written in 1972 under the auspices of UNESCO, the United Nations Educational, Scientific and Cultural organization. It now has 158 member states. The United States ratified it in 1973, while Canada accepted it in 1976.

The Convention belongs to the member states. Every two years, these states elect members of the World Heritage Committee, which oversees the Convention's implementation with the support of UNESCO's Secretariat and World Heritage Centre, and of non governmental organizations like the International Council on Monuments and Sites (ICOMOS).

The Convention is an important tool of international cooperation and scientific developments. It brings together a vast array of cultures, types of heritage, and traditions of management, while establishing common bases and principles.

World Heritage List

The List is the most visible evidence of the Convention, to a point that it receives a lot of attention in comparison to other necessary work. This register of cultural, natural, and mixed sites has now 630 sites inscribed (480 cultural, 128 natural, 22 mixed). Inscription is decided by the World Heritage Committee at its annual meeting, after recommendation from the NGO advisors like ICOMOS. Sites are proposed by countries, must have an "outstanding universal value," pass the test of authenticity (material, design, setting, workmanship), and respond to criteria according to the type of property (buildings and monuments, historic towns, archaeological sites, cultural landscapes, etc.). Member states are also invited to present in advance a tentative list of sites that they would like to nominate.

Recent Past

The List does not have a special category for recent or old. Outstanding universal value remains the reference. The List is a reflection of how heritage is evolving in terms of perception.

Over the last few years, the World Heritage Committee reviewed the List and developed a Global Strategy to improve its global representation. This effort includes a greater recognition of the heritage of the twentieth century, for instance, from a design or historical perspective, as well as a greater emphasis on cultural landscapes.

Among the 480 cultural sites on the List, few are specifically inscribed on the basis of their belonging to the cultural or historical developments of the twentieth-century, not to mention Modernism as a segment of that period. The earliest inscription of a twentieth-century design was the work of Gaudi in Barcelona (1984), followed by Brasilia (1987),

Skogskyrkogarden cemetery in Stockholm (1994), and Bauhaus buildings in Dessau and Weimar (1996). Other sites are related to twentieth century history: Auschwitz (1979), Genbaku Dome in Hiroshima (1996), or Robben Island in South Africa (1999). Germany's Volklingen Ironworks were listed in 1994 for the continuum of its nineteenth- and twentieth-century. technology. Also, Orozco's modern frescoes in the nineteenth-century. Hospicio Cabanas (Guadalajara, Mexico) are mentioned in the listing text.

However, many of the existing sites, especially urban sites, include a Recent Past aspect. For instance, Moscow's Kremlin and Red Square (1990) include Lenin's Mausoleum, a modern structure of major architectural interest. The Holy See (the only entire country to be on the World Heritage List) includes the Audience Hall designed by Nervi.

The Issues

Listing recent sites as World Heritage raises ethical and technical issues, many of which are similar to those raised at the national level. Can we have sufficient critical distance to judge the outstanding universal value of a product of our generation? What about the values that are not based on art or history, like technical development? What about the International Style versus local cultures? How about the recent vernacular? How do we prioritize such heritage resources while the resources of other periods and cultures are left unattended or unrepresented? How do we recognize projects of which the original concepts may be of outstanding value but which are physically decaying? These are only a few of the questions raised.

The Convention's Operational Guidelines provide some indications of how these questions may be addressed. Over time, the guidelines have evolved. For instance, a criterion is now provided for historic towns which addresses the issue of twentieth-century towns whose urban organisation is readable and whose authenticity is undeniable, but whose future is unclear because of uncontrolled development. In order to enhance the Convention's ability to help preserve recent as well as older heritage, ICOMOS in cooperation with DOCOMOMO has called expert meetings (see the report of the 1995 Helsinki Meeting) to help provide guidance.

Beyond the procedural jargon, these activities and others, such as the Preserving the Recent Past conferences or the work of the Council of Europe and the European Heritage Days, are indicative of a current shift and opening of traditional conceptions of cultural heritage. These efforts also reflect a furthering of cooperation between governmental and non-governmental organisations as well as between cultures.

For further information on the web:

UNESCO www.unesco.org
ICOMOS www.icomos.org
Council of Europe culture.coe.fr
European Heritage Days culture.coe.int/jep/

ICOMOS Seminar on Twentieth-Century Heritage, in cooperation with UNESCO (World Heritage Center) and ICCROM Helsinki, 18-19 June 1995

Aim of the Seminar

Considering the breath of current understanding of cultural heritage, and that it is conceived to include all periods of time until the present as well as all types of heritage.

Considering further the quality and quantity of cultural properties of the recent past, and the potential or real threats facing this heritage, particular attention is required for the safeguarding and care also of the twentieth-century heritage.

The ICOMOS Seminar on Twentieth-Century Heritage had three specific objectives:

1. to recognize the state of the art seen in the international context;

2. to explore the ways and means to develop methodologies for a critical process for the analysis and assessment of the significance of the twentieth-century heritage in its various forms and in relation to the social, political, economic, and cultural context;

3. to draw conclusions concerning the methodology for the definition and identification of properties of outstanding universal significance in view of their potential inclusion on the World Heritage List of UNESCO.

Previous Action

Several organizations, especially the Council of Europe and DOCOMOMO, have already initiated action in this regard. Such action includes the "Council of Europe Recommendation on the Protection of the Twentieth-Century Architectural Heritage" of 9 September 1991, as well as the work for the identification and characterisation of such heritage by DOCOMOMO, an organization created in 1988.

In recent years, several meetings have been organized to discuss the definition, inventory and conservation of the recent heritage; these include in particular:

- ICOMOS expert meeting in Paris, 1985;
- Council of Europe: seminar in Vienna 1989 and in Barcelona 1990;
- Meetings of DOCOMOMO (Eindhoven 1990, Dessau 1992, Barcelona 1994);
- Meeting on Art Deco of France and Canada in Ottawa; 1994;
- Conference on Preserving the Recent Past in Chicago, 1995.

Interest of Recent Heritage for International Cultural Cooperation

The heritage of the twentieth century, including architecture, town planning, and cultural landscapes, has been based on the cross-fertilization of ideas, influences, and ways of life at an international level. In many cases, such movements have experienced an integration into the cultural and social context of each country. Such integration has enriched the heritage, and made it reflect the cultural diversity of each area.

General Recommendations

The ICOMOS seminar came to the following conclusions:

1. It is noted that the twentieth-century heritage should not be defined only with reference to its architectural forms, but taking into account the broad ecological, social, anthropological, economic, and cultural framework that forms the whole. There is a need to stress the importance of memory over considerations of materials.

2. The established principles of conservation are a valid basis for the safeguarding and care of the recent heritage.

3. While some of the heritage of the twentieth century has particular characteristics that differentiate it from earlier constructions, it results substantially from the continuity of heritage. Its identification and inventory need to be updated on a regular basis. Attention is required to all types and even modest examples of such heritage, and in particular to urban and rural ensembles, housing schemes, and industrial heritage.

4. Systematic documentation of the twentieth-century heritage in all its dimensions and in relation to its context is necessary. Such documentation should take into account the potential offered by new recording methods.

5. Due attention should be paid to the full spectrum of the heritage of the entire century, including buildings and ensembles built in new technologies as well as those using traditional building materials and structural forms.

6. It is recognized that the life cycles of man-made environments are mainly based on economic and functional considerations, and require critical choices to guide the process of selection of cultural properties that merit protection.

7. Considering the international character of much of the twentieth-century heritage, networking and joint efforts are of particular importance. Such action should be taken in relation to identification and inventory as well as in relation to education and training in collaboration with existing initiatives.

8. Research programmes on specific problems concerning techniques and materials in restoration work should be encouraged, with due respect to their aesthetic qualities. The publication of results from achieved experiences and preparation of corresponding specialized bibliographies are priority actions.. Attention should be given to the economic positive consequences of restoration and regular maintenance with respect to employment policy and sustainable development.

9. In order to promote communication and raise public awareness, the media should be used to stress the importance of the twentieth-century heritage, especially to the young people. The international community should also draw attention to the qualities and values of specific cultural properties.

10. The Council of Europe Recommendation, R (91) 13, gives some general guidelines for actions in this field. (Appendix 1).

11. A follow-up of the seminar is necessary. It should include the distribution of the working documents and keeping regular contacts between participants. If a future meeting is organized on this subject, it should be open to other disciplines and decision makers, and should take place in another part of the world.

Recommendations Concerning the World Heritage Convention

Following the recommendations of the experts' meeting of the World Heritage Centre and ICOMOS

in June 1994, which suggested a Global Strategy "to move away from a purely architectural view of cultural heritage towards one which was more anthropological, multifunctional and universal," the Helsinki Seminar emphasized the merging of the various expressions of the twentieth-century heritage. These expressions embody both the changes and innovations of the century as well as traditional forms and expressions.

It was agreed:

- that there be an on-going process of consultations between ICOMOS, DOCOMOMO, and the World Heritage Centre in order to define twentieth-century heritage and develop a methodology for its identification;

- and that it would be advisable only in exceptional cases to propose for inclusion to the World Heritage List properties which are less than twenty-five years old in order to allow sufficient time for historical perspective and scientific analysis.

Acknowledgements

The ICOMOS Seminar on Twentieth-Century Heritage in Helsinki was organized by Finnish National Committee of ICOMOS and was hosted by the Museum of Finnish Architecture in Helsinki 18-19 June 1995. The seminar counted on the collaboration of UNESCO/World Heritage Centre and of ICCROM. It gathered some twenty-five experts from thirteen countries, including representatives of international organizations.

The participants of the Helsinki seminar congratulated the organizers for the excellent organization of the works and the cordial reception offered during the seminar.

Appendix 1
(Council of Europe)
Recommendation No. R (91) 13 of the Committee of Ministers to Member States on the Protection of the Twentieth-Century Architectural Heritage
(Adopted by the Committee of Ministers on 9 September 1991 at the 461st meeting of the Ministers' Deputies)

The Committee of Ministers, under the terms of Article 15.b of the Statute of the Council of Europe,

Considering that the aim of the Council of Europe is to achieve a greater unity between its members;

Having regard to the European Cultural Convention signed in Paris on 19 December 1954, and Article 1 thereof in particular;

Having regard to the Convention for the Protection of the Architectural Heritage of Europe signed in Granada on 3 October 1985, and Article 17 thereof in particular;

Having regard to Resolution 813 (1983) of the Parliamentary Assembly of the Council of Europe on contemporary architecture;

Having regard to Resolution No. 2 of the 2nd European Conference of Ministers responsible for the Architectural Heritage held in Granada on 3 and 4 October 1985;

Observing that twentieth-century architecture is an integral part of Europe's historical heritage and that the preservation and enhancement of its most significant elements serve the same aims and principles as those of the conservation of the architectural heritage as a whole;

Noting that because this section of the heritage is recent, abundant in examples, wide-ranging and diverse in character, it is less well recognized by official organisations and by the public than other parts of the architectural heritage;

Emphasising that a lack of a specific interest in conserving this heritage would lead to irreparable losses and deprive future generations of this period of European consciousness,

Recommends that the governments of the member states develop strategies for the identification, study, protection, conservation, restoration and public awareness of twentieth-century architecture with reference to the principles set out in the appendix to this recommendation, as part of their general policy for conserving the built heritage and, where necessary, by means of specific measures.

Instructs the Secretary General to transmit the text of the present recommendation to non-member states party to the European Cultural Convention and/or the Convention for the Protection of the Architectural Heritage of Europe.

Appendix to Recommendation No. R (91) 13
Principles for the conservation and enhancement of the architectural heritage of the twentieth century

I. Identification of the twentieth-century heritage

1. Promoting knowledge and study of the heritage

Since the end of the nineteenth century, architecture and urban planning have undergone profound changes due to industrialisation, the introduction of new materials, the transformation of construction techniques and new uses. This trend has gathered pace, at the same time as technological progress, in order to meet the needs of contemporary society. Buildings of the twentieth century are many in number and of varying character: they reflect both traditional and modernist values. With the exception of the work of certain pioneers, the buildings produced in the twentieth century are not recognized as having heritage value. It is therefore necessary to encourage better knowledge and understanding of this part of the heritage by drawing attention to its qualities and the wealth and diversity of its different forms.

The research required for such a fuller understanding should take into account the whole conspectus of available sources, whether in the form of original graphic or photographic material, of information published at the time of the works in question, or of any other type of information which enables them to be considered in their appropriate context and on comprehensive understanding of buildings.

2. Making systematic inventories

The aim here is to assemble systematic documentation on twentieth-century buildings either in the form of national lists covering all periods or by drawing up lists specific to twentieth-century architecture. These lists should be:

- open-ended rather than selective, and amenable to continuous updating, revision and extension in the light of fresh information;
- drawn up without prejudice as to style, type of building, method or period of construction;
- designed, presented and published in such a manner that their content is available to the broadest possible public, in terms of vocabulary used, illustrations and arrangements for distribution;
- compiled where possible so as to take account of survey practices in the different European countries, so as to promote mutual communication and understanding of these informative and analytical methods throughout Europe.

II. Protection of the most significant heritage items

1. Criteria for selection

The authorities responsible for protection should adopt specific criteria based on the following considerations:

- the desirability of acknowledging the value of significant works taken from the whole range of styles, types and construction methods of the twentieth century;
- the need to give protection not only to the works of the most famous designers in a given period or style of architecture, but also to less well-known examples which have significance for the architecture and history of the period;
- the importance of including, among the selection factors, not only aesthetic aspects but the contribution made in terms of the history of technology and political, cultural, economic and social development;
- the crucial importance of extending protection to every part of the built environment, including not only independent structures but also duplicated structures, planned estates, major ensembles and new towns, public spaces and amenities;
- the need to extend protection to external and internal decorative features as well as to fittings and furnishings which are designed at the same time as the architecture and give meaning to the architect's creative work.

2. Practical measures for legal protection

It is the task of the relevant authorities, in accordance with the procedures applicable in each country:

1) to make use of such legislation as already exists on conservation of the heritage, urban planning or the environment in respect of the architectural heritage of the twentieth century in order to:
   - protect buildings or artefacts by including them among lists of items to be protected or areas designated for conservation;
   - make active use of the procedures for planning permission and control that are afforded by such measures of protection;

2) to supplement existing legislation by specific measures where this recent heritage is not protected, or is inadequately protected.

III. Management and conservation of the heritage

1. Use of the heritage

The relevant national, regional or local authorities have a duty to encourage the most appropriate use to be made of the protected heritage of this period, whether it be used for cultural or museum purposes or more generally for economic, commercial or residential purposes. Encouragement should be given to finding new uses which take account of the needs of present-day life so that buildings are not allowed to fall derelict, provided the new use does not run counter to the architectural or historical significance which was the reason for their protection.

2. Physical conservation
Atmospheric pollution and the ageing of materials result in deterioration and require maintenance and restoration of the heritage, even when it is recent. It is important to:

- promote scientific, theoretical and practical studies into methods of construction, maintenance and restoration of these structures and the various materials used in twentieth-century architecture and the corresponding decorative arts;
- respect the same fundamental principles as are applied to other elements of the architectural heritage in planning programmes of maintenance and restoration of these structures;
- create a full and careful record of observations made and action taken within the context of conservation;
- set up at the appropriate national or regional level a system of information and architectural record, so that the history of buildings can be elicited and their future maintenance ensured.

3. Training of specialists
It is important to improve and enhance the knowledge and use of appropriated building materials and technologies for construction and conservation. This will require the in-depth training of construction firms which carry out the physical work of conservation on site.

The particular nature of twentieth-century architectural techniques entails specialisation on the part of the professionals whose task it is to study and preserve this heritage. The authorities of the member states should arrange for special training to be given, either as part of general architectural training or in the framework of specialist training courses in the restoration of the built heritage.

The essential training should cover methods of study, investigative methods for this type of heritage and practical maintenance and restoration techniques. A special effort should be made in respect of specialized restoration techniques and crafts. Sufficient resources should be made available by the authorities for research and the training of experts.

IV. Promotion of awareness among persons in positions of responsibility and among the public

It is for the authorities of the member states to take a range of initiatives promoting awareness of the value and distinctive character of the various forms of twentieth-century architecture among elected representatives, building owners and users, professionals, the media and the public at large. This action will entail:

1. Encouraging programmes of education at every level both inside and outside schools, particularly as the majority of schools operate within a twentieth-centuryenvironment. This knowledge of a heritage that is close to the pupils should go hand in hand with discovery of the significance of architecture, urban planning and the environment;

2. Use of all available forms of media for campaigns of publicity, support for specialist publications, public debates or educational experiments in the broadest sense.

V. The necessity for future European cooperation

European co-operation is vital for the protection of the twentieth-century heritage because of the similarity and complexity of the construction techniques used, the problem of criteria for selection, and practical maintenance and conservation methods. For this purpose, member states are invited to:

1. encourage the regular exchange of experts, technical understanding and experience between educators, historians, architects, technicians and other professionals involved in protection and conservation;

2. develop mutual technical assistance, in particular by means of the machinery for technical assistance operated by the Council of Europe;

3. encourage increased understanding of the heritage and a co-ordination of effort at European level in order to solve problemsconcerning selection criteria and techniques of physical conservation;

4. promote policies to generate awareness of the twentieth-century heritage through publications and media campaigns under the auspices of the Council of Europe;

5. study the possibilities for multilateral conservation projects which could be set up at the European level for particularly important aspects of the twentieth-century heritage.

UNESCO World Heritage Convention

Criteria for the Inclusion of Cultural Properties in the World Heritage List

(Articles 23-42 from the 2000 Version of the Operational Guidelines)

23. The criteria for the inclusion of cultural properties in the World Heritage List should always be seen in relation to one another and should be considered in the context of the

definition set out in Article 1 of the Convention which is reproduced below:

> monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
>
> groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
>
> sites: works of man or the combined works of nature and of man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological points of view.

24. A monument, group of buildings or site - as defined above - which is nominated for inclusion in the World Heritage List will be considered to be of outstanding universal value for the purposes of the Convention when the Committee finds that it meets one or more of the following criteria and the test of authenticity. Each property nominated should therefore:

i. represent a masterpiece of human creative genius;

ii. or exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

iii. or bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared; or

iv. be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history; or

v. be an outstanding example of a traditional human settlement or land-use which is representative of a culture (or cultures), especially when it has become vulnerable under the impact of irreversible change; or

vi. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance (the Committee considers that this criterion should justify inclusion in the List only in exceptional circumstances and in conjunction with other criteria cultural or natural);

and

i. meet the test of authenticity in design, material, workmanship or setting and in the case of cultural landscapes their distinctive character and components (the Committee stressed that reconstruction is only acceptable if it is carried out on the basis of complete and detailed documentation on the original and to no extent on conjecture).

ii. have adequate legal and/or traditional protection and management mechanisms to ensure the conservation of the nominated cultural properties or cultural landscapes. The existence of protective legislation at the national, provincial or municipal level and/or a well-established contractual or traditional protection as well as of adequate management and/or planning control mechanisms is therefore essential and, as is clearly indicated in the following paragraph, must be stated clearly on the nomination form. Assurances of the effective implementation of these laws and/or contractual and/or traditional protection as well as of these management mechanisms are also expected. Furthermore, in order to preserve the integrity of cultural sites, particularly those open to large numbers of visitors, the State Party concerned should be able to provide evidence of suitable administrative arrangements to cover the management of the property, its conservation and its accesibility to the public.

25. Nominations of immovable property which are likely to become movable will not be considered.

26. With respect to groups of urban buildings, the Committee has furthermore adopted the following Guidelines concerning their inclusion in the World Heritage List.

27. Groups of urban buildings eligible for inclusion in the World Heritage List fall into three main categories, namely:

i. towns which are no longer inhabited but which provide unchanged archaeological evidence of the past; these generally satisfy the criterion of authenticity and their state of conservation can be relatively easily controlled;

ii. historic towns which are still inhabited and which, by their very nature, have developed and will continue to develop under the influence of socio-economic and cultural change, a situation

that renders the assessment of their authenticity more difficult and any conservation policy more problematical;

iii. new towns of the twentieth century which paradoxically have something in common with both the aforementioned categories: while their original urban organization is clearly recognizable and their authenticity is undeniable, their future is unclear because their development is largely uncontrollable.

28. The evaluation of towns that are no longer inhabited does not raise any special difficulties other than those related to archaeological sites in general: the criteria which call for uniqueness or exemplary character have led to the choice of groups of buildings noteworthy for their purity of style, for the concentrations of monuments they contain and sometimes for their important historical associations. It is important for urban archaeological sites to be listed as integral units. A cluster of monuments or a small group of buildings is not adequate to suggest the multiple and complex functions of a city which has disappeared; remains of such a city should be preserved in their entirety together with their natural surroundings whenever possible.

29. In the case of inhabited historic towns the difficulties are numerous, largely owing to the fragility of their urban fabric (which has in many cases been seriously disrupted since the advent of the industrial era) and the runaway speed with which their surroundings have been urbanized. To qualify for inclusion, towns should compel recognition because of their architectural interest and should not be considered only on the intellectual grounds of the role they may have played in the past or their value as historical symbols under criterion (vi) for the inclusion of cultural properties in the World Heritage List (see paragraph 24 above). To be eligible for inclusion in the List, the spatial organization, structure, materials, forms and, where possible, functions of a group of buildings should essentially reflect the civilization or succession of civilizations which have prompted the nomination of the property. Four categories can be distinguished:

i. Towns which are typical of a specific period or culture, which have been almost wholly preserved and which have remained largely unaffected by subsequent developments. Here the property to be listed is the entire town together with its surroundings, which must also be protected;

ii. Towns that have evolved along characteristic lines and have preserved, sometimes in the midst of exceptional natural surroundings, spatial arrangements and structures that are typical of the successive stages in their history. Here the clearly defined historic part takes precedence over the contemporary environment;

iii. "Historic centres" that cover exactly the same area as ancient towns and are now enclosed within modern cities. Here it is necessary to determine the precise limits of the property in its widest historical dimensions and to make appropriate provision for its immediate surroundings;

iv. Sectors, areas or isolated units which, even in the residual state in which they have survived, provide coherent evidence of the character of a historic town which has disappeared. In such cases surviving areas and buildings should bear sufficient testimony to the former whole.

30. Historic centres and historic areas should be listed only where they contain a large number of ancient buildings of monumental importance which provide a direct indication of the characteristic features of a town of exceptional interest. Nominations of several isolated and unrelated buildings which allegedly represent, in themselves, a town whose urban fabric has ceased to be discernible, should not be encouraged.

31. However, nominations could be made regarding properties that occupy a limited space but have had a major influence on the history of town planning. In such cases, the nomination should make it clear that it is the monumental group that is to be listed and that the town is mentioned only incidentally as the place where the property is located. Similarly, if a building of clearly universal significance is located in severely degraded or insufficiently representative urban surroundings, it should, of course, be listed without any special reference to the town.

32. It is difficult to assess the quality of new towns of the twentieth century. History alone will tell which of them will best serve as examples of contemporary town planning. The examination of the files on these towns should be deferred, save under exceptional circumstances.

33. Under present conditions, preference should be given to the inclusion in the World Heritage List of small or medium-sized urban areas which are in a position to manage any potential growth, rather than the great metropolises, on which sufficiently complete information and documentation cannot readily be provided that would serve as a satisfactory basis for their inclusion in their entirety.

34. In view of the effects which the entry of a town in the World Heritage List could have on its

future, such entries should be exceptional. Inclusion in the List implies that legislative and administrative measures have already been taken to ensure the protection of the group of buildings and its environment. Informed awareness on the part of the population concerned, without whose active participation any conservation scheme would be impractical, is also essential.

35. With respect to cultural landscapes, the Committee has furthermore adopted the following guidelines concerning their inclusion in the World Heritage List.

36. Cultural landscapes represent the "combined works of nature and of man" designated in Article 1 of the Convention. They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal. They should be selected on the basis both of their outstanding universal value and of their representativity in terms of a clearly defined geo-cultural region and also for their capacity to illustrate the essential and distinct cultural elements of such regions.

37. The term "cultural landscape" embraces a diversity of manifestations of the interaction between humankind and its natural environment.

38. Cultural landscapes often reflect specific techniques of sustainable land-use, considering the characteristics and limits of the natural environment they are established in, and a specific spiritual relation to nature. Protection of cultural landscapes can contribute to modern techniques of sustainable land-use and can maintain or enhance natural values in the landscape. The continued existence of traditional forms of land-use supports biological diversity in many regions of the world. The protection of traditional cultural landscapes is therefore helpful in maintaining biological diversity.

39. Cultural landscapes fall into three main categories, namely:

i. The most easily identifiable is the clearly defined landscape designed and created intentionally by man. This embraces garden and parkland landscapes constructed for aesthetic reasons which are often (but not always) associated with religious or other monumental buildings and ensembles.

ii. The second category is the organically evolved landscape. This results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features. They fall into two sub-categories:

> a relict (or fossil) landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant distinguishing features are, however, still visible in material form.
>
> a continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time.

iii. The final category is the associative cultural landscape. The inclusion of such landscapes on the World Heritage List is justifiable by virtue of the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent.

40. The extent of a cultural landscape for inclusion on the World Heritage List is relative to its functionality and intelligibility. In any case, the sample selected must be substantial enough to adequately represent the totality of the cultural landscape that it illustrates. The possibility of designating long linear areas which represent culturally significant transport and communication networks should not be excluded.

41. The general criteria for conservation and management laid down in paragraph 24.(b).(ii) above are equally applicable to cultural landscapes. It is important that due attention be paid to the full range of values represented in the landscape, both cultural and natural. The nominations should be prepared in collaboration with and the full approval of local communities.

42. The existence of a category of "cultural landscape", included on the World Heritage List on the basis of the criteria set out in paragraph 24 above, does not exclude the possibility of sites of exceptional importance in relation to both cultural and natural criteria continuing to be included. In such cases, their outstanding universal significance must be justified under both sets of criteria.

Commemorating Canada's Built Heritage of the Modern Era

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In the mid-1990s, the Historic Sites and Monuments Board of Canada, the agency charged with advising the Minister of Canadian Heritage on the commemoration of nationally significant aspects of our history, requested a study on evaluating and commemorating Canada's buildings and sites of the Modern era. As a result, Montréal architect and educator Susan D. Bronson was hired by Parks Canada to prepare a framework study on this under-represented theme in the Canadian family of national historic sites.

Ms. Bronson's report, "Built Heritage of the Modern Era: Overview, Framework for Analysis, and Criteria for Evaluation," was based on research carried out between January and June 1997. For the purposes of the study, "built heritage of the Modern era" was defined as buildings, ensembles and sites constructed between about 1930 and the mid 1970s. Its primary focus was on how national significance could be evaluated, not on recommending specific sites for commemoration. Its aims were threefold:

1. to provide an overview of current local, national and international approaches to analysing and evaluating the built heritage of the Modern era;

2. to propose an approach to a framework for the analysis of Canadian resources of this period; and

3. to propose preliminary criteria for the evaluation of those resources that possess potential national significance.

The Scope and Period of Study

A wide view of the scope of the heritage in question was adopted in the framework study—thus the title "Built Heritage" rather than "Modern Architecture." This view takes into account the broadening definition of cultural heritage used in the past decade by those involved in commemoration, in Canada and abroad. Included are buildings, groups of buildings—including urban, suburban and rural districts—and sites, including cultural landscapes, urban squares, cemeteries, parks and gardens.
This view is not restricted to landmarks or works of well-known designers; it also encompasses more modest examples of our built heritage, regional expressions of various cultures in the Canadian mosaic and resources designed by and for previously neglected groups such as First Nations and the working class. The scope also includes resources that represent, either in terms of their form or their function, a regional or cultural response to the developments of the period. Examples include the new planned communities and facilities in the Canadian North, and the post-and-beam "West Coast Style" structures in British Columbia.

The Modern era in Canada may be defined conceptually by a conspicuous and widespread faith in the future, extraordinarily rapid changes to lifestyles and unprecedented growth. These traits had an impact on the way most Canadians lived, and on the places where they lived. Their effect on the built environment began tentatively during the



Living room of the D.C. Simpson house II (1953), West Vancouver, British Columbia, from The New Spirit: Modern Architecture in Vancouver, 1938–1963, *presented at the Canadian Centre for Architecture, Montréal, 1997. Courtesy of Barry and Gregg Simpson. © 1996 Graham Warrington*

Depression years, intensified following the Second World War and peaked in the 1950s. In the 1960s, the preoccupations of Canadians gradually began to change when some of the basic premises of the 1940s and 1950s began to be questioned. By the early 1970s Canadians were once again looking to the past for clues to improving their environment and dealing with new domestic and global challenges.

In this study, the Modern era was therefore considered to encompass the years from about 1930 to about 1975; that is, from the period when a faith in a better future *independent* of the past began to take hold and find expression in a significant number of buildings, to the period when Canadians' faith in a better future untethered to the past began to fade, replaced by the *rooted* architecture of the heritage conservation and post-Modernist movements. It was accepted that this era began and ended with several years of transition—and that it is somewhat misleading to define an era in terms of precise dates.

A Threatened Heritage

The framework study emphasized that Canadian buildings, ensembles and sites of the Modern era are no less threatened than the built heritage of earlier eras. Indeed, for several reasons, many of them are more vulnerable than their predecessors: there is still generally less appreciation of the significance of the built heritage of this period; the materials and methods of construction were often less durable, and in some cases experimental or not designed for longevity; the aging process, particularly in instances where maintenance has been poor, is sometimes less graceful than for earlier heritage; and the conservation challenges are often technically more difficult. This ongoing threat, which has already led

to the loss or degradation of a number of significant structures and landscapes from this period, suggests that systematic efforts to protect selected resources of the Modern era need to be made.

The study confirmed that there is a great deal of interest on the part of professionals and scholars in the built heritage of the Modern era in Canada. At the same time, those involved in this field agree that many property owners, decision-makers and members of the general public remain sceptical about the relevance of its protection. Others stress the urgency of dealing with it as soon as possible, as these resources are threatened with demolition and neglect, and it will soon be too late.

Despite these mixed views, a wide range of efforts to research, inventory, commemorate and protect the built heritage of the recent past has been initiated by municipalities, provinces, interest groups and scholars across the country. These vary in approach, from treating this heritage in the same manner as the earlier vintage to designing special inventory and research programs to take into account the factors that distinguish it from its forerunners. In addition, the last few years have witnessed a number of creative initiatives to increase awareness of the importance of identifying, documenting and researching the buildings, ensembles and sites that speak to the cultural and technological preoccupations of this period. Such undertakings present tremendous potential for collaboration between different levels of government, academic institutions and interest groups.

A Survey of Current Approaches to Inventory and Commemoration

A major component of the study was a cross-country survey to determine how the inventory and commemoration of recent heritage is being handled by planning departments, advisory boards, heritage authorities and interest groups. Almost 100 persons were contacted. The objectives of this survey were:

1. to establish contact with resource people involved in the commemoration of the built heritage of the Modern era across the country; and

2. to get an idea of the level of interest in the built heritage of the recent past in different parts of the country, and of how the research, inventory, commemoration and protection of the built heritage of this era are being addressed by various groups.



The Aldred Building (1929–1931), part of the provincially designated Old Montréal historic district. © Parks Canada, Pierre St-Jacques, H.05.160(77)

The survey addressed six broad issues: interest in the project; relevance of the subject; inventories planned or undertaken; activities aimed at commemoration or protection; research; and public awareness initiatives.

Interest. It is clear from the survey that interest in the project is high. It was generally agreed by respondents that there is a clear need for sharing information on this topic, and a large number of

people expressed appreciation to Parks Canada for taking the initiative to carry out this preliminary survey and make its findings available.

Relevance. With few exceptions, the resource persons contacted agreed that the subject was relevant: the built heritage of the recent past is worthy of attention as far as research, inventory, commemoration, protection and public awareness are concerned, despite its popular reputation as too ugly, too socially irresponsible or too recent to be considered "heritage." In addition, most municipal and provincial government representatives noted that they are still focusing their limited human and financial resources on the inventory and protection of earlier heritage; recent heritage is often considered of secondary importance to earlier heritage. There was almost unanimous agreement that ongoing cutbacks and downsizing are preventing any new initiatives that imply special funding—such as the preparation of an inventory of recent heritage—from moving forward. Some cities and provinces are working with heritage legislation that was developed in the 1970s or early 1980s, and acknowledge that it is time to re-evaluate their policies given the broadening definition of heritage.

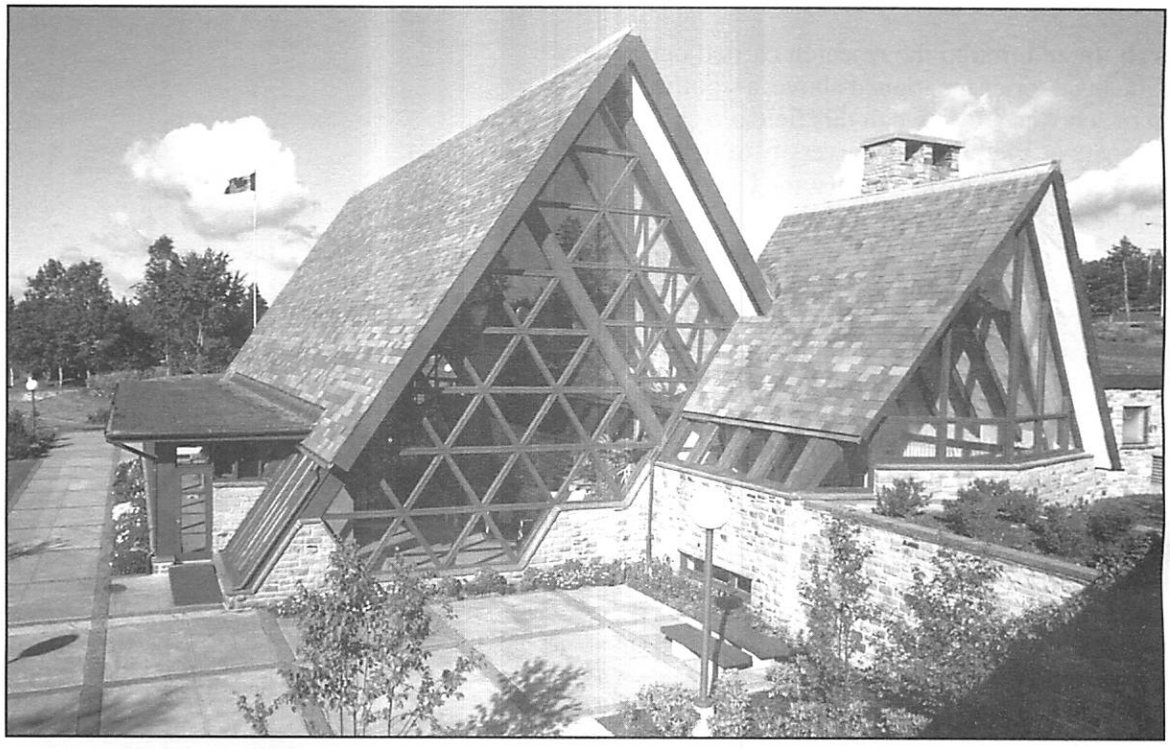
Nevertheless, some have managed to make the recent past a priority: the non-profit Winnipeg Architecture Foundation, for example, has received funding to research and photograph the city's built heritage from the 1940–1975 period; the District of North Vancouver has completed such an inventory; and the City of Toronto–North District (North York) has already published its survey, *North York's Modernist Architecture*.

Inventory. Despite an overall focus in Canada on pre-Modern-era heritage, a number of inventories of recent heritage have been undertaken in different parts of the country. At the provincial level, for example, Nova Scotia has made a preliminary selection of some 20 buildings in the Halifax area as a starting point for developing the criteria for designation, and Saskatchewan is documenting recent heritage on an *ad hoc* basis as the opportunity arises. At the municipal level, cities such as Montréal and Québec City have inventories that include both the heritage of the recent past and earlier heritage; there are no cutoff dates, and buildings, sites and neighbourhoods of all eras are covered. Others have initiated special municipal inventories of their recent heritage, including a number of the communities in the urban regions of Toronto and Vancouver.

The three Canadian working parties of DOCOMOMO, an international, non-governmental organization devoted to the documentation and conservation of the modern movement, have been very active in this field: DOCOMOMO Québec



The Winnipeg Clinic (1959), researched and photographed by the Winnipeg Architecture Foundation.
© David Firman, Winnipeg Architecture Foundation



The Alexander Graham Bell Museum (1953–1956) in Baddeck, Nova Scotia, a Recognized Federal Heritage Building. © Parks Canada, J. Steeves, H.03.31.01.12(26)

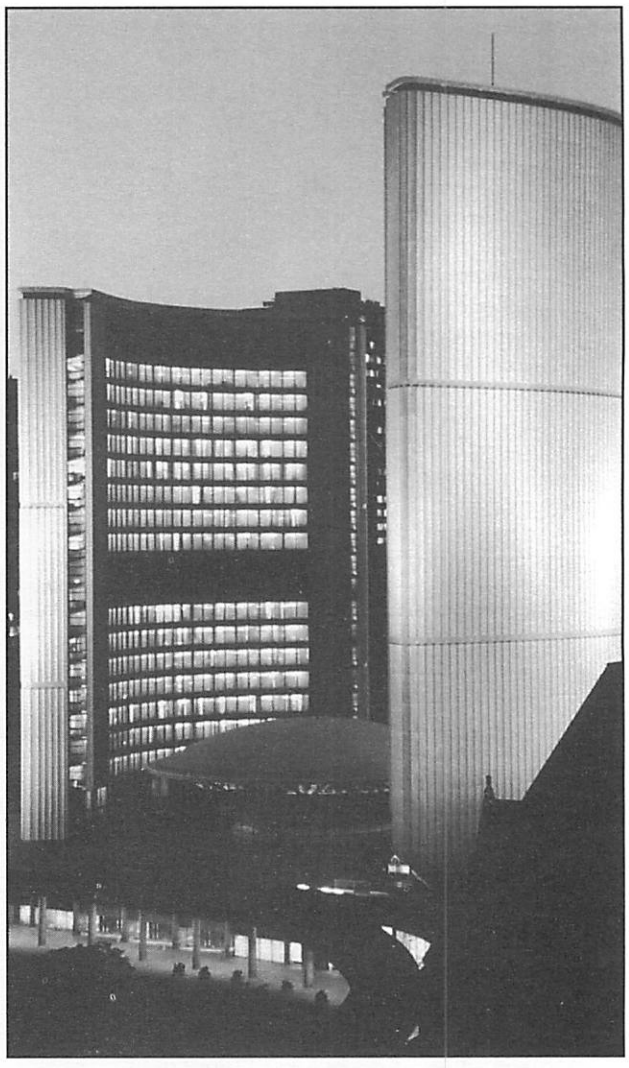
began an inventory of representative recent heritage in that province in 1992; DOCOMOMO Ontario carried out an inventory of about 20 of what it felt to be Ontario's most important Modern buildings; and DOCOMOMO.BC has completed the documentation of 14 sites in British Columbia. The most outstanding of these were included in a DOCOMOMO International publication prepared in connection with its conference in Brasilia in 2000. Some universities have also tackled inventories: students taking the course "Modern Architecture in Canada" at the University of Waterloo, for example, inventoried buildings in the Kitchener-Waterloo area, and University of Victoria faculty and students working with the local chapter of the Architectural Institute of British Columbia have initiated an inventory of post-war Victoria architecture.

Commemoration and protection. The framework study concluded that our Modern built heritage is sadly under-represented in terms of commemoration and protection. Only three percent of our National Historic Sites and less than a quarter of our designated Federal Heritage Buildings post-date 1930. Few provinces have designated buildings, ensembles or sites of the Modern era. Most provincial representatives report that their efforts are focused on earlier heritage because so much work remains to be completed and funding is limited. British Columbia and Quebec, among other provinces, noted that municipalities are being encouraged to assume additional responsibility for heritage designations because it was thought that protection could be better ensured at the local level through zoning regulations, permit review and other municipal mechanisms. At the same time, DOCOMOMO Québec has lobbied the province for a heritage policy that supports Modern architecture's contributions to contemporary culture. Most municipalities distinguish between *listing* on their inventory, which implies documentation but typically not protection, and *designation*, which involves protection and in some cases financial incentives. For example, fifty buildings from 1945 and later are included among the properties listed on the City of Toronto (now Toronto–South District) inventory; of these, twelve have been designated. Twenty of the 100 buildings identified in Vancouver's Recent Landmarks Program have been added to the city's Heritage Register listing; three of these have been designated. To date, designations of the recent past are largely restricted to buildings, as opposed to sites or neighbourhoods. Some recent heritage in certain cities is protected because it is located within a municipally designated conservation district. Such is the case in Montréal and Saint John, New Brunswick; in Toronto's Wychwood Park Heritage Conservation District, about 15 percent of the 57 properties date from 1945 and later.

Research. In addition to the research carried out as part of the inventories mentioned above, a significant number of scholars are active in this field, notably at the University of Victoria, the University of British Columbia, the University of Calgary, the University of Manitoba, the University of Waterloo, the University of Toronto, Carleton University, the Université du Québec à Montréal, McGill University, Université Laval and DalTech. The School of Design at the Université du Québec à Montréal has created the first graduate-level programme in North America devoted specifically to understanding and protecting Modern architecture. A number of independent researchers are also carrying out research on 20th-century architecture and modernism in Canada, and the Canadian Centre for Architecture in Montréal has created a fellowship to support research in this subject.

Public awareness. It was generally agreed by respondents that any efforts aimed at the inventory, commemoration and protection of the heritage of the recent past should involve education: municipal councils, property owners and the general public have to be convinced of the relevance of the work of this period. At the civic level, a pamphlet on Vancouver's Modern heritage prepared a few years ago has proved to be a useful tool for informing owners of the importance of their buildings and for negotiating interventions. The former City of North York published its inventory for the same reason, as has the District of West Vancouver, which also integrated projects involving recent heritage into its heritage awards program, thereby stimulating both public and professional interest in the subject. Interest groups and cultural institutions have played an instrumental role in increasing public awareness about this period in their communities' architectural history. DOCOMOMO has organized tours, technical workshops, public lectures and conferences, and has produced newsletters in both printed and electronic formats to sensitize people to the merits of the Modern movement. Exhibitions on the Modern built heritage of Vancouver, Calgary and Kitchener-Waterloo have been successfully staged by local and national institutions; the Canadian Centre for Architecture in particular has been stimulating research on 20th-century architecture and planning by hosting exhibits on this period.

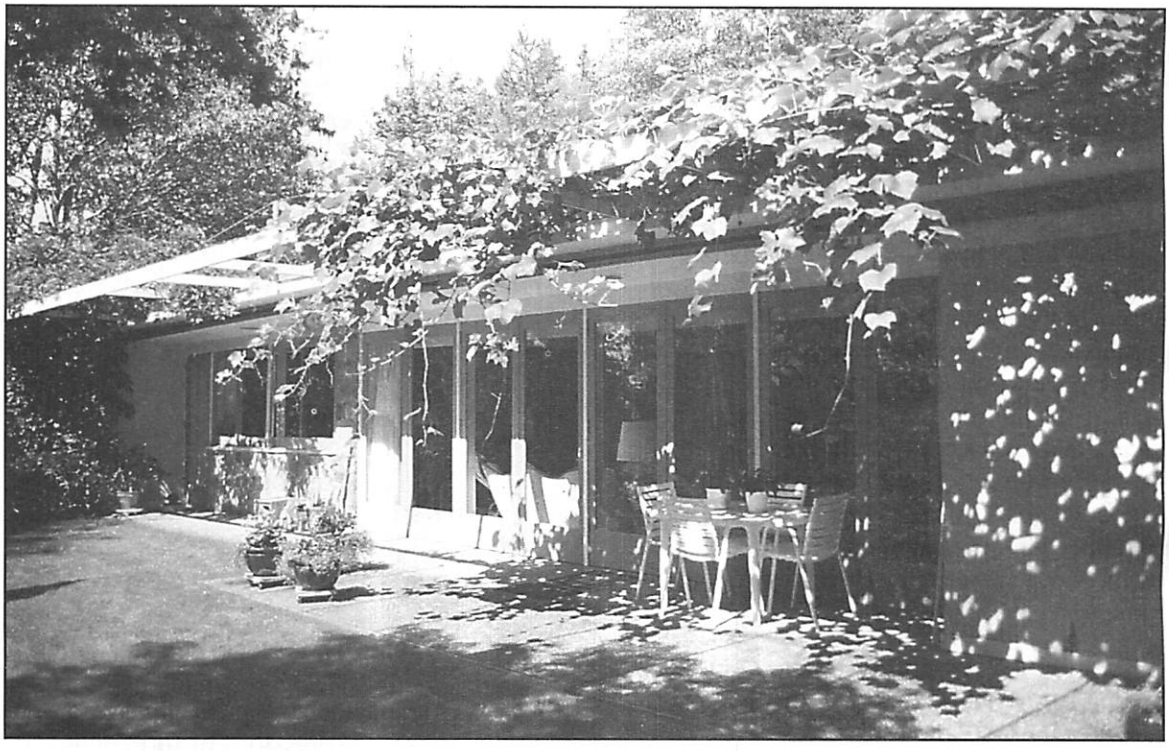
A number of new publications on the buildings and sites of the Modern era have become available during the last decade, and professional and scholarly journals such as *ARQ: La revue d'architecture,* the



Toronto City Hall (1957–1965), a municipally designated heritage property. © Heritage Toronto

Journal of the Society for the Study of Architecture in Canada, the *Journal of the Society of Architectural Historians* and the *Association for Preservation Technology Bulletin* have featured articles on the subject. Electronic media also present excellent potential for increasing public awareness of the built heritage of the Modern era. Victoria's Modern architecture, for example, has its own web site at http://www.maltwood.uvic.ca/Architecture/ma/.

In light of the interest shown by the current generation of architectural practitioners and students in the Modern era, there is tremendous potential to involve both professionals and aspiring architects in some of these awareness initiatives. In addition, since a number of the architects and builders who were active during the Modern era are still living, the time is opportune to talk to them and thus gain insight



The B.C. Binning House (1941) in West Vancouver, British Columbia, designated a National Historic Site in 1997. © District of West Vancouver

into their careers, education and thinking that is not necessarily evident in the journals of the period and the works themselves. The District of North Vancouver, the former City of North York and the Canadian Centre for Architecture are all exploring the potential of such "oral history" projects.

A Framework for Analysis

The study recommended that a framework for analysis should provide efficient and effective analysis and evaluation of the resources from this period; create a broader understanding of the scope of the heritage of this era and how its production was influenced by cultural phenomena in Canadian history; build on existing and ongoing research, inventory and public awareness efforts (and provide opportunities for continued collaboration between those involved); prepare material that could be used to raise awareness and encourage citizen input into the commemoration process; and be shared with other countries and thus contribute to the understanding of the cultural heritage of this era throughout the world—and perhaps eventually to identify Canadian resources for nomination to the World Heritage List.

The study argued that the most appropriate, realistic and manageable way to organize a framework that covers the full scope of Canada's built heritage of the Modern era was according to broad categories of use. Ten categories were proposed: education; religion; commerce and industry; government and public activities; culture, recreation and leisure; transportation and communication; housing; health care; military activities; and mixed-use districts and complexes. "Single-family housing," a prototype for these analytical frameworks, has since been developed to place the trend-setting Binning House in West Vancouver (built 1941) into context.

The Evaluation of National Significance

The identification of significant resources of the Modern era depends on a clear understanding of the cultural phenomena that this heritage expresses. The study therefore proposed that evaluation of the national significance of our Modern built heritage be based on the resource's ability to illustrate three cultural phenomena that generally characterized this era: (a) changing social, economic and political conditions; (b) rapid technological advances; and (c) new ways of expressing form and responding to functional demands.

The identification of significant resources of the Modern era also depends on the resource's integrity, or "authenticity," insofar as this factor

affects national significance. The application of authenticity as a criterion for evaluating the built heritage of the Modern era, which is at least as subject to change as earlier heritage, is the topic of ongoing discussion in the heritage field. Many buildings and sites of this period have long outlived their original raison d'être and have been altered to accommodate new uses. In addition, many materials and construction methods—and in some cases entire buildings or sites—were designed for regular replacement after a limited lifespan. The framework study therefore recommended that the assessment of the integrity of a building, ensemble or site of the Modern era be based on a clear understanding of both the original intentions of those responsible for its design, and the conditions that have affected its evolution through time, based on a realistic approach to its ongoing use and its relationship with its environment.

Conclusion and Criteria for Evaluation

Parks Canada's study "Built Heritage of the Modern Era: Overview, Framework for Analysis, and Criteria for Evaluation" confirmed many suspicions concerning the commemoration of buildings, groups of buildings and sites of the recent past, notably that interest in the Modern era is growing. The study also revealed some unanticipated findings, including that the built heritage of the recent past is receiving more than expected attention as far as research, inventory, commemoration, protection and public awareness are concerned. It also confirmed that, in terms of commemoration and protection, the Modern era is significantly under-represented in Canada.

The study, it should be remembered, focused on the notion of national significance, not on identifying specific buildings or sites for commemoration. The Historic Sites and Monuments Board of Canada reviewed the report in November 1997, and made four recommendations:

1. It indicated its support for addressing Modern architecture along the lines suggested, including the scope and time period proposed in the study.

2. It recommended that the program establish frameworks for the comparative analysis of the built heritage of the Modern era based on ten broad categories of use: education; religion; commerce and industry; government and public activities; culture, recreation and leisure; transportation and communication; housing; health care; military activities; and mixed-use districts and complexes.

3. It agreed to accept the preliminary criteria/guidelines that had been proposed to evaluate resources of the period having the potential of national significance:

A building, ensemble or site that was created during the modern era may be considered of national significance if it is in a condition that respects the integrity of its original design, materials, workmanship, function and/or setting, insofar as each of these was an important part of its overall intentions and its present character; and

1) it is an outstanding illustration of at least one of the three following cultural phenomena and at least a representative if less than an outstanding illustration of the other two cultural phenomena of its time:
   (a) changing social, political and/or economic conditions;
   (b) rapid technological advances;
   (c) new expressions of form and/or responses to functional demands;
   or,
2) it represents a precedent that had a significant impact on subsequent buildings, ensembles or sites.

Under normal circumstances, the Board will not consider a building, ensemble or site that meets the above criteria/guidelines unless five years have passed since the death of those responsible for its design.

4. And finally, the Board agreed that continued collaboration with others involved with the theme was necessary to successfully advance a program of national commemoration of the built heritage of the Modern era. In order to encourage such collaboration and to heighten awareness of the built heritage of the Modern era initiative, the Board requested that the study be précised, translated and sent to provincial heritage ministries, national heritage organizations and



The English Heritage Experience

Pete Smith
Inspector of Historic Buildings
English Heritage
London, England

In England buildings of architectural or historic interest are protected through a system commonly referred to as "Listing." The name is derived from the Lists, which the Secretary of State responsible is instructed by legislation to produce. Before making his, or her, decision about whether a building deserves the protection of this system, the Secretary of State will seek the advice of specialist advisors in English Heritage. It is the task of Historic Building Inspectors, like myself, within the Listing Branch of English Heritage, to assess the buildings put forward for protection, and then to advise the Secretary of State as to whether the buildings satisfy the criteria laid down by the government in various circulars and planning guidance documents. After assessing these buildings we make recommendations to the Secretary of State, with an appropriate grade allocation and description, if we feel the building satisfies the criteria. It is then for the Secretary of State to decide whether to accept our advice or not. The Minister can and does seek the advice of others including owners, local councils, and specialist pressure groups, though with our specialist knowledge of English architecture and our experience of the listing standards the Minister accepts our advise in over 90 percent of cases.

This Listing system has evolved over the last fifty years, though it has its roots in the late-nineteenth century, with the passing of the first Ancient Monuments Act in 1882. Though this Act only established a voluntary form of protection for a very limited range of archaeological sites and ancient structures like ruined abbeys and castles, it did at least establish the principle of compiling schedules of structures thought worthy of protection. Ironically, this system failed to protect Tattershall Castle in Lincolnshire, which was threatened with shipment to the United States in 1911, and the castle's eventual dramatic last minute reprieve was only brought about by the financial intervention of a private individual, Lord Curzon. The national outcry that followed this case eventually led to the Ancient Monuments Consolidation and Amendment Act of 1913, which for the first time gave the local authorities powers to compulsorily purchase properties on the Schedule of Ancient Monuments if the owners proposed alteration or demolition.

In the years immediately after the Great War, it was the destruction of country houses and Georgian public buildings which occupied conservationists and which eventually led to the foundation of the Georgian Group in 1936. But it was not until the Second World War and the large scale bombing of various English cities that the government decided to introduce another system for the protection of historic buildings rather than ancient monuments. In 1940 a "salvage list" was introduced to identify those important buildings that would qualify for restoration or rebuilding after the war if they were badly damaged by bombing. The very first lists, compiled by "panel architects" selected by the Ancient Monuments Branch of Her Majesty's Office of Works, were completed by 1943, though further suggestions were immediately considered and added

in 1944. Many of these lists were compiled from various voluntary lists, which had been drawn up by local authorities and architectural societies in the interwar years. These wartime lists were very limited in their scope and they gave no statutory protection to any of these buildings.

It was not until immediately after the war that these lists became the foundation for the preservation of historic buildings as we know it. The Town and Country Planning Acts of 1944 and 1947 set up the basic planning process that we still use in the United Kingdom today, and the new lists of buildings of architectural and historic interest were included as part of this process. Buildings identified on these lists were given special protection, which meant that they required a separate consent from the local council Planning Committee if they were to be altered or demolished. These lists were very simple and basic at first, consisting of little more than the building's address and the name of its owner if known, plus the grade at which the building was registered. These grades are now in ascending order, grade II, grade II*, and grade I, and they reflect the architectural or historic importance of the building concerned. The immediate postwar years were ones of austerity and petrol rationing so very few resources were available for the compilation of these lists, and it is perhaps not surprising that the first complete set of statutory lists for the whole of England were not completed and issued until 1970. The criteria laid down for these early lists meant that the buildings selected were largely those built before 1840, like medieval churches and Georgian country houses. The study of Victorian architecture was still in its infancy at this time, and it is therefore not surprising that very few Victorian or Edwardian buildings were included on this first set of lists.

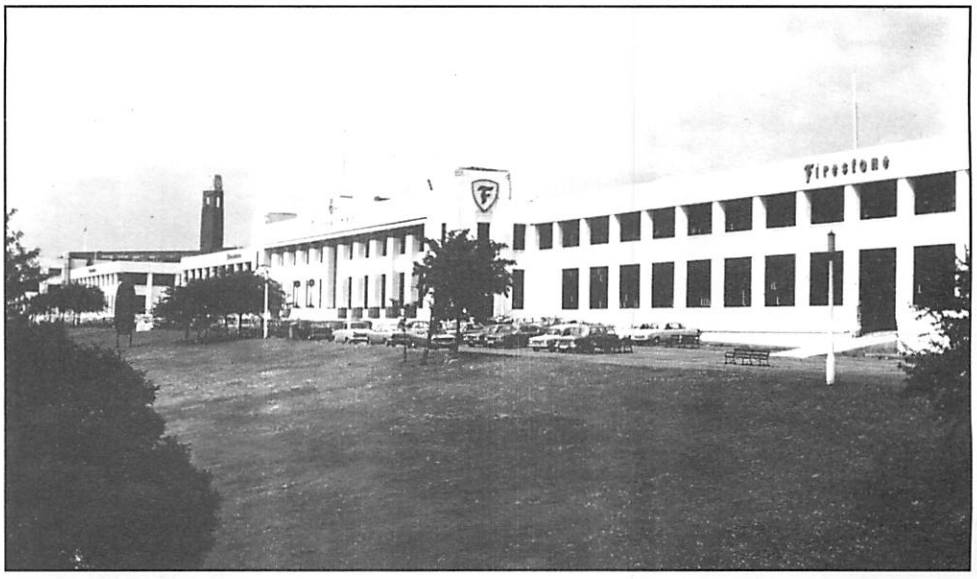
The completion of the first set of lists in 1970 highlighted just how much our knowledge and appreciation of architecture had changed in the intervening years since 1947. The boom years of the 1960s had seen the wholesale destruction of many buildings that today we would consider to be of real architectural and historic interest, and the destruction of buildings like the Euston Arch, designed by Philip Hardwick as the entrance gate to Euston Railway Station in London, caused a public outcry. It gave momentum to the newly founded Victorian Society and led to a change in the criteria for the selection of listed buildings. The new criteria stressed not only the inclusion of previously overlooked Victorian buildings but formally began to consider buildings from the years 1919 to 1939, where previously only exceptional individual items, such as the work of Sir



Entrance arch, Euston Station. Philip Hardwick, architect, 1838. The first symbolic structure of the railway age, wantonly demolished in 1958. National Buildings Record.

Edwin Lutyens, were listed. Now Modernism was looked at for the first time. Sir Nikolaus Pevsner was asked to recommend a list of what he considered were the fifty most important buildings built in England between the wars. Unsurprisingly, this list was dominated by many pioneering examples of international Modernism, mostly designed by émigré architects like Walter Gropius and Erich Mendelsohn or their British followers like Maxwell Fry, though it did also include some more traditional buildings by architects like Goodhart-Rendel. These buildings, which included such well known examples as the Boots Wet Processing Factory at Beeston, Nottinghamshire, by Sir Owen Williams of 1932 and the De La Warr Pavilion at Bexhill, Sussex, designed by Mendelssohn & Chermayeff in 1936, eventually became known as Pevsner's Fifty and were approved by the Minister and added to the list in 1970.

For the next decade a few further interwar buildings were added to the list, but it was not until the untimely demolition of the Firestone Factory in west London in August 1980 that attention was drawn to the protection of a far broader range of buildings from this period. The public outcry caused by the demolition of this famous Art Deco style building led to the drawing up of a further list of 150 recommendations of interwar buildings for inclusion on the list. These buildings were approved by the Historic Buildings Committee chaired by the traditional architect John Brandon-Jones and then passed to the Minister, who readily accepted almost all of them in early 1981. Amongst these recommendations were a far broader selection of interwar buildings including not only traditional



Firestone Factory. Great West Road. Hounslow. Before demolition in August 1980.
English Heritage.



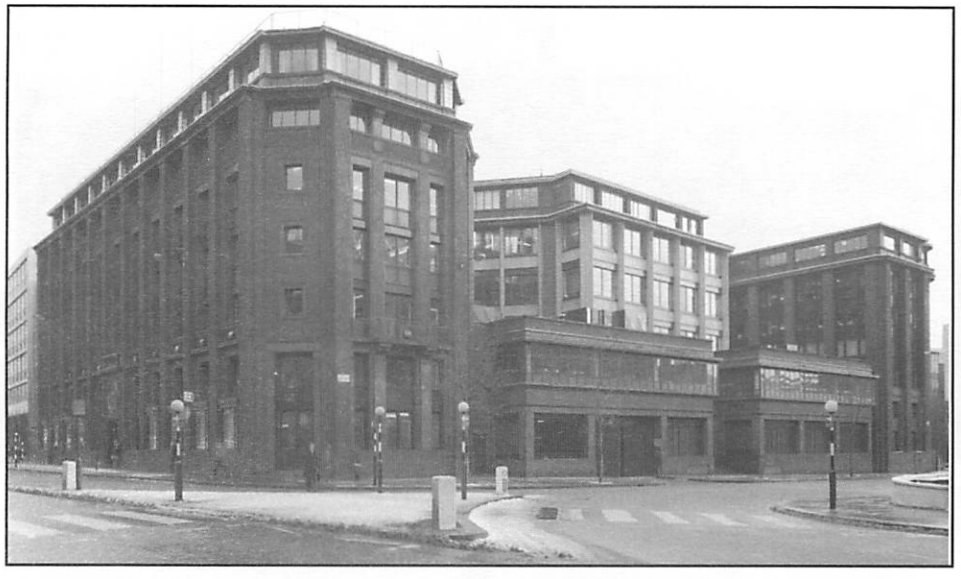
Firestone Factory. Great West Road. Hounslow. After demolition in August 1980.
English Heritage.

buildings like Leeds City Hall by E. Vincent Harris of 1930—1932, or the brick Modern style of St. Saviour, Eltham, London by Welch, Cachemaille-Day & Lander in 1933, but also more colourful Art Deco style buildings like the Hoover Factory in west London by Wallis, Gilbert & Partners, of 1932–35, and cinemas such as the Odeon, Muswell Hill, of 1936 by George Cole.

In April 1987 the Department of the Environment issued a Statutory Instrument that changed the criteria for listing in an even more dramatic way, for it introduced for the first time the concept of the "Thirty Year Rule." This allowed for any building more than thirty years old to be considered for inclusion on the list. Obviously since this rule was introduced in 1987, this meant that any building built before 1957 could then be considered, and it meant that for the first time examples of postwar architecture could be considered for statutory protection. At the same time the "Ten Year Rule" was also introduced, which allowed for the consideration of any building for listing if it was threatened with alteration or demolition, and was of high enough quality to warrant either grade II* or grade I status. Both these new "rolling rules," as they have become known, have introduced a quiet revolution into the possibilities for preserving historic



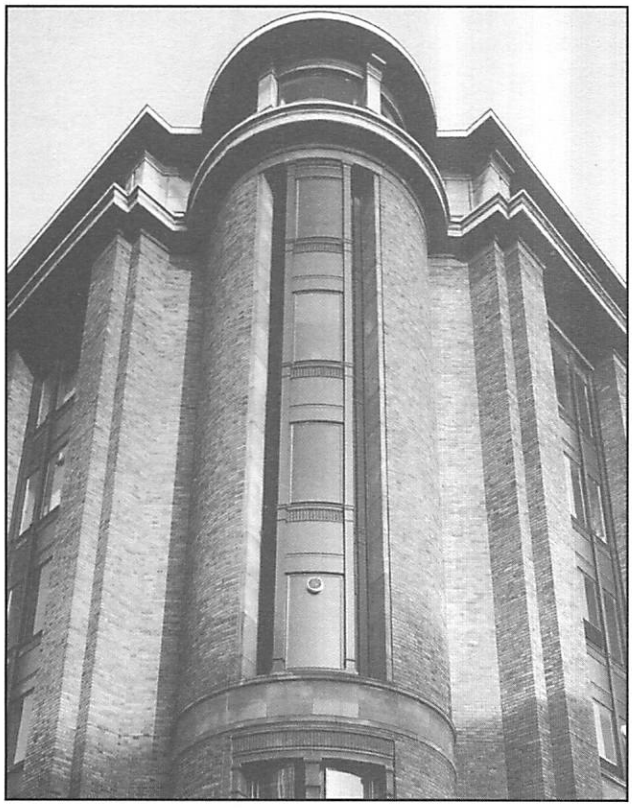
St. Saviours Church. Middle Park Avenue. Greenwich. 1990. English Heritage.



Bracken House, Cannon Street, London. English Heritage.

buildings. The first result of these new rules was the announcement by the Minister that a public competition would be held to identify the "first fifty" postwar buildings to be added to the list. The very first postwar building to be included on the list was Bracken House, built for the Financial Times newspaper between 1956 and 1959 to the designs of Sir Albert Richardson, because it was threatened with complete demolition at that time.

The competition run in a Sunday newspaper produced much interest and a plethora of suggestions, some for demolition rather than preservation. The more serious ideas from this source combined with other internal suggestions were then put before the Listing Sub-Committee of the Historic Buildings Advisory Committee. From these initial suggestions the Committee produced a shortlist of seventy buildings that they felt represented a broad range of styles from traditional to modern, as well as the work of both major public bodies and private architectural firms. It also took into account such important factors as the postwar shortage of materials, government policies, and the development of system-built structures.



Bracken House, Cannon Street, London. 1955–1959.. English Heritage.



Coventry Cathedral, St. Michael and the Devil. Sir Jacob Epstein, 1958–1959. English Heritage.



The Royal Festival Hall. London. 1993. English Heritage.

In March 1988 a new Secretary of State, Lord Caithness, after serious consideration decided to list only eighteen of these seventy recommendations. They included the more obvious and popular suggestions like Coventry Cathedral designed by Sir Basil Spence, 1951–1962, and the Royal Festival Hall designed by the London County Council Architects Department, 1948–1951, both listed at grade I, as well as many of the more traditional style recommendations like Cripps Hall of Residence at Nottingham University by Farquharson, McMorran & Whitby, 1956–1961. But it was clearly noticeable that few Modern style buildings were accepted and that no public housing or industrial buildings were listed. These decisions came as a great shock to the Listing Branch at English Heritage. Peter White, the then Head of Listing, decided that a new approach was needed if the listing of postwar buildings was to continue successfully.

The new strategy employed by the Listing Branch of English Heritage has involved a range of different approaches. These included a series of public exhibitions and booklets to canvas the support and suggestions of members of the public. A detailed thematic survey of the architecture of the period, by specific building types, was based largely on research in the architectural journals of the time. Candidates for listing were carefully inspected and photographs of very high quality taken. A new Steering Group was founded made up of a broad range of those interested in postwar architecture including academics, journalists, architects, engineers, planners as well as in-house historians and listing inspectors. This committee has the responsibility of assessing every postwar building put forward for inclusion on the list before they are sent to the Secretary of State for his approval. All these new features have added up to a completely new system for selecting postwar buildings, which has proved very successful, for almost all of those buildings that were initially rejected in 1988 have now been included on the list. In fact there are now more than 350 postwar listed buildings in England and one of our inspectors, Elain Harwood, has recently completed a book that illustrates all these listed building. This book, *England; A Guide to Post-war Listed Buildings*, is due to be published by Ellipsis at the end of July this year and will we hope be available for delegates at this conference.

Historic Scotland: Preservation Update

Historic Scotland is an Executive Agency of the Scottish Executive. Its role is to protect and present to the public Scotland's built heritage and to advise Scottish Ministers on associated policy matters. It manages properties in care and fulfils statutory obligations to protect ancient monuments and historic buildings in the ownership of others.

Through its Technical Conservation, Research and Education Division, Historic Scotland researches issues and develops skills relating to the built heritage, and aims to raise the standards of conservation practice amongst building owners, contractors and professional groups. It disseminates the products of academic and scientific research and analysis through a structured and integrated approach to publications, lecturing and training.

Current research includes: the use of lime mortars and renders, environmental control of dry rot, life cycle costing of timber windows, natural slate performance and use, vernacular building methods and materials, early twentieth century reinforced concrete, carved stone decay, and the consequences of stone cleaning. Forthcoming publications include: *Non-Destructive Investigation of Standing Structures; Lime Harling and Rendering; Chemical Consolidants and Waterproofers for Sandstones in Scotland;* and *Conservation of Historic Graveyards.*

Information is published in the form of Research Reports, Technical Advice Notes (TAN), Guides for Practitioners, Case Studies, Conference Proceedings and reference Reports.

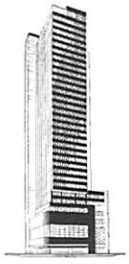
The latest title in the TAN series is *Corrosion in Masonry-Clad Early 20th Century Steel Framed Buildings: Technical Advice Note 20.* Evidence of structural defects is being recorded, with increasing frequency, in steel-framed buildings constructed in the first half of the twentieth century. This is commonly traced to the effects of corrosion of the steelwork which results in cracking, displacement or even spalling of masonry cladding which can be both costly and disruptive to repair. Exceptionally, higher levels of corrosion may cause damage to the steel structure requiring specialist strengthening or structural replacement work in addition to any resulting cladding repairs. Many such buildings are listed or lie within conservation areas, and therefore repair calls for careful consideration of both the conservation and the engineering issues. The causes and consequences of the processes of corrosion are examined in the TAN, and guidance is offered on currently available methods of maintenance and repair to halt or reduce the problems once identified.

A trained eye is needed to detect defects resulting from corrosion behind masonry surfaces, and the TAN is intended to be supplemented by appropriate professional expertise. Defects may be specific to one building and can arise from a number of factors such as previous repairs, alterations to the structure or construction, installation of services, or from external influences. The range of masonry claddings described includes stone, brick, glazed brick, terracotta, faience and glass and vitrolite. Whilst similar methods were used in early designs variations may arise due to the quality of construction and materials and these must be recognised. The

principles described are, however, generally applicable to all types of cladding materials. The TAN should assist those involved with the repair of traditional buildings to prepare specifications appropriate to the materials and method of construction whilst acknowledging, and applying, good conservation practice.[1]

Notes

[1] The TAN is fully illustrated with line diagrams, colour photographs, maintenance inspection checklist and bibliography. 84pp, A4, 2000 (PB), ISBN 1 900168 52 9
Price £15.00 + p&p.
Contents include: Historical Background, Construction of Stone-Clad Steel Framed Buildings Prior to 1940, Corrosion, Records and Data Collection, Problematic Building Details, and Identification of Corrosion Problems.



From the Glass House to Stonewall: National Register Recognition of the Recent Past

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Our paper presented at the 1995 *Preserving the Recent Past* conference described trends in recognizing places for significance in the recent past through listings in the National Register of Historic Places.[1] At that time about three percent of total listings met the National Register criteria for evaluation's requirement of exceptional importance for achieving significance within the past fifty years. This percentage remains constant.

Since that time, scholarship and changing public perceptions have resulted in the registration of a variety of interesting new cultural resources representing all areas of significance and criteria and numerous themes. More than two hundred additional properties have been listed for exceptional significance: half of these new listings are recognized for their importance in community history, while approximately a quarter document importance statewide, and a quarter nationally. Public interest is growing, as is the need to document contexts for evaluating resource types from the recent past. The National Register is working with partners in addressing some of the evaluation issues and making information from some National Register files available for public education purposes, and the National Historic Landmarks Survey has supported some outstanding recent resources for National Historic Landmark (NHL) designation.[2]

Although almost as many listings represent historic associations with the broad patterns of history, the trend continues that most of the recent properties listed in the last five years possess architectural significance. Works of master twentieth-century architects are some of the most visible. Philip Johnson's Glass House, an icon in American architecture, and Walter Gropius' house in Lincoln, Massachusetts, were recently designated NHLs as the ultimate embodiments of their respective design philosophies. Numerous Usonian houses by Frank Lloyd Wright and Mies van der Rohe's first high-rise, the 1949 Promontory Apartments in Chicago, are additional examples. Another example, the Mies van der Rohe Residential District and Lafayette Park constructed between 1956 and 1963 as the

collaborative effort of Mies, planner Ludwig Hilberseimer, landscape architect Alfred Caldwell, and developer Herbert Greenwald, includes three residential high-rise towers and a townhouse complex in downtown Detroit. Recent biographers of Mies have characterized the acclaimed project as "closer than anything Mies ever designed to a realization of his ideas of modern architecture in the service of modern American living." Caldwell's Lafayette Park is assessed as one of the most spatially successful and socially significant statements in urban renewal.

Caldwell is not the only landscape architect whose designs are beginning to be recognized along with the buildings. The General Motors Technical Center in Warren, Michigan, is significant in the areas of architecture, engineering, landscape architecture, and transportation for the period from 1949 to 1970. The Center is one of the earliest and most influential examples of the application of the International style to American suburban corporate architecture and an outstanding example of Eero Saarinen's work. Working with Saarinen, landscape architect Thomas Church designed a high-style modernist landscape with a well-defined rectilinear plan and the five staff facilities of the corporate campus situated around a rectilinear lake on the 326-acre site. In terms of its influence upon landscape architecture, historian Robert L. Miller called the Technical Center the "near-definitive" example of the mid-twentieth-century corporate campus, "the example most historians would place in a time capsule" (Figure 1).

Other listed examples of exceptional corporate architectural expression include the 1952 International style Simms Building, the first high-rise in downtown Albuquerque, New Mexico; the 1967 American Zinc, Lead and Smelting Company Building in downtown St. Louis, Missouri, a stainless steel-clad Vierendeel truss building that blends aesthetics and engineering to provide company identity with a design solution that had only gained acceptance for building exteriors in the 1960s; and the Reynolds Metals Company International Headquarters in Richmond, Virginia, designed by premier corporate architect Gordon Bunshaft of Skidmore Owings & Merrill and landscape architect Charles F. Gillette in 1958.

Comparative contexts for evaluation are essential. The National Register's multiple property submission (MPS) format, which is also used for NHL theme studies, includes sections to document historic context, property types and their registration requirements, methodology, and bibliography.

Nominating authorities have used the MPS format extensively for nominations and are beginning to prepare them to provide the context for nominating cultural resources from the recent past, as Georgia and South Dakota have done with their MPS nominations for Lustron Houses. Approximately one-third of properties listed in the National Register have been nominated under the MPS format. A list of all MPS documents nationwide is available on the National Register's web site,[3] and researchers may order copies of the full text and sample nominations for any MPS, as other states may do, to help them in preparing MPS documentation or in evaluating individual examples of property types. We are seeking the resources necessary to make all context documentation available via our web site.

The NHL Survey supported the designation of the Irwin Union Bank and Trust, the Miller House, First Baptist Church, and North Christian Church in Columbus, Indiana, because the sponsors of the nominations developed an excellent theme study and MPS entitled *Modernism in Architecture, Landscape Architecture, Design and Art in Bartholomew County, Indiana, 1942–1965*. The 1954 Irwin Union Bank, the 1957 Miller House, and the 1964 North Christian Church, all designed by Eero Saarinen with landscapes by Dan Kiley, and the 1965 First Baptist Church by Harry Weese were designated by the Secretary of the Interior because the context documented the dramatic impact of the local patronage program and the awards and acclaim for these properties and their designers to prove that they are superb masterpieces of national significance.

Objectively evaluating modern architecture can be difficult. How much time needs to pass and how much popular acclaim and scholarly assessment are necessary to provide the perspective to determine with objectivity that a property is truly of historic significance? The nomination by the Arkansas State Historic Preservation Officer for *The Arkansas Designs of E. Fay Jones, Architect 1956–1997 MPS* raised these issues. According to the context in the submission, Jones maintained a practice in the mountains of northwest Arkansas concentrating on residential architecture for twenty-five years and only became well known with the completion of his Thorncrown Chapel in Eureka Springs in 1980, for which he received the American Institute of Architect's (AIA) Honor Award in 1981. In 1990 the AIA recognized Jones's full body of work with its highest tribute, the Gold Medal. In surveys conducted the next year, architects ranked Jones second among six "most admired" living architects



Figure 1. General Motors Technical Center, general aerial view. Photograph by Randy Shulz.

and Thorncrown Chapel as the best work of American architecture during the 1980s. Though still living, Jones was forced to retire in 1997 by illness, and his remarkable body of work is complete. Based on a survey of seventy-five of his works in Arkansas (from his two hundred total works), seven were selected as exceptional examples of his work to be nominated as part of the MPS, which provides the context and rationale for determining which of his buildings were eligible for listing. These seven buildings were selected for nomination based on the opinion of the state's professional staff and because they were identified by Jones himself as particularly important to his design philosophy.

The 1956 E. Fay and Gus Jones House, (Jones' first built project, which expressed the guiding principles of his personal organic design philosophy, was well received, and effectively jump-started his career as a residential designer in Arkansas), and the highly acclaimed Thorncrown Chapel were relatively easy to evaluate as eligible and were listed. The very recent dates of several of the other buildings (two others from the 1980s) and the lack of critical appraisal of these individual examples in relation to the body of his work resulted in a return of the other five to the state for additional consideration of the registration requirements and reassessment of whether sufficient time has passed and outside analysis has been done to evaluate these buildings.

Preservationists have been slower to document properties in the arts than in architecture. Who would doubt the exceptional importance of the Georgia O'Keefe Home and Studio in Abiquiu, New Mexico, designated a NHL in 1998, as the place where she lived for so long and did so much of her work almost until the time of her death. The weathered nineteenth-century Olson House in South Cushing, Maine, was listed because Andrew Wyeth was inspired to use the house, its immediate environment, and its occupants Christina and Alvaro Olson in a series of drawings, watercolors, and tempera paintings, including the widely recognized *Christina's World* between 1939 and 1968. The Rothko Chapel in Houston, Texas, was built by collectors Dominique and John de Menil in 1971 to house fourteen large color field paintings, the final work of American abstract expressionist Mark Rothko. According to the nomination, it is the primary site for recognizing

his convictions, intentions, and working methods. Barnett Newman's *Broken Obelisk* contributes to the site's significance as an early work of monumental modern sculpture placed there as a memorial to Rev. Dr. Martin Luther King, Jr.

More surprising are several folk art environments nominated by State Historic Preservation Officers. The Genaro P. and Carolina Briones House in the *East Austin MPS* was listed for both architecture and art as the largest and most prominent example of tinted concrete ornamentation on a building in the state of Texas and as the master achievement of bricklayer and plasterer, Genaro Briones. Known locally as Casa de Suenos ("House of Dreams"), the house Briones built between 1947 and the 1970s features brightly tinted sculpted stucco surfaces on both the exterior and interior and many other sculptural elements including reinforced concrete yard furniture, which imitate stone and wood. It is an excellent example of modern Texas folk architecture and an exceptional example of Mexican-American folk art. Built between 1956 and 1965, Grandma Prisbrey's Bottle Village in Simi Valley, California, was registered for its significance in art, architecture, and landscape architecture. Bottle Village consists of various shrines, wishing wells, follies, connected walkways, cactus gardens with sculpture, a "fence" of television tubes, two trailers in which Mrs. Prisbrey lived, and sixteen ornamental structures, fifteen which house Mrs. Prisbrey's various collections of lipstick cases, pine cones, horse shoes, shells, gourds, toothbrushes, books, shot glasses, golf tees, and more than 600 dolls and 17,000 pencils. Most all Village materials were salvaged by Mrs. Prisbrey from the local dump and have been placed in mortar to create the contributing resources in the district. Grandma Prisbrey's Bottle Village is recognized by folk art authorities as an exceptional example of twentieth-century environmental folk art, as is Ed Galloway's Totem Pole Park on Oklahoma State Highway 28A near Route 66, which was created by one of Oklahoma's premier folk artists of the 1905–1961 period, Nathan Edward Galloway. The nomination cites a number of publications that persuasively demonstrate the widespread recognition by scholars and the public of Totem Pole Park's importance (Figure 2).

In another area of significance for the arts, music, the John Coltrane House at 1511 North Thirty-third Street in Philadelphia was designated a NHL. African American saxophonist and composer John Coltrane, who lived in this house from 1952 until 1967, transformed the development of jazz in the 1950s and 1960s and became one of its most

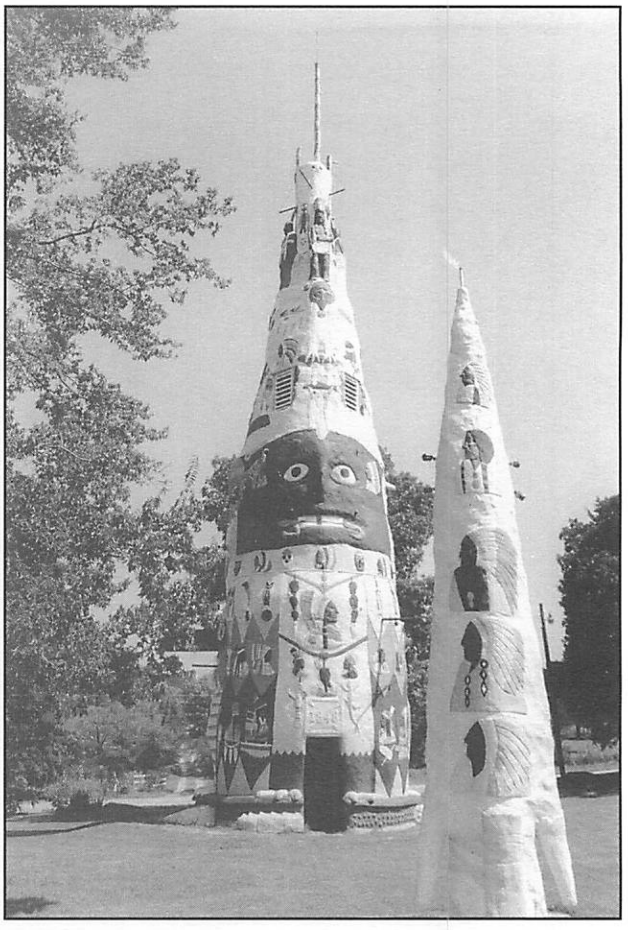


Figure 2. Ed Galloway's Totem Pole Park, Main and Arrowhead Totems. Photograph by Dianna Everett.

influential performing artists (Figure 3). Pivotal in the local jazz and blues music scene in East Austin, Texas, during the 1940s, 1950s, and 1960s, the Victory Grill was an important stop along what was known as the "Chitlin Circuit," which was the route that followed major highways from the North to the South encompassing the only venues where African American musicians could perform during the age of segregation. For more than three decades jazz greats and local legends alike performed at this community cultural institution, which continues today to work collaboratively with several organizations to revitalize the cultural life of the neighborhood.

In the area of community planning and development, preservation advocates know that some of the numerous postwar suburbs are important, but we need to figure out which ones and why. National Register-listed Arapahoe Acres in Englewood, Colorado, built between 1949 and 1957, is recognized for its high quality architectural design and outstanding historic integrity. Developer Ernest Hawkins and designers Eugene Sternberg, Joseph Dion, and Stanley Yoshimura joined together to

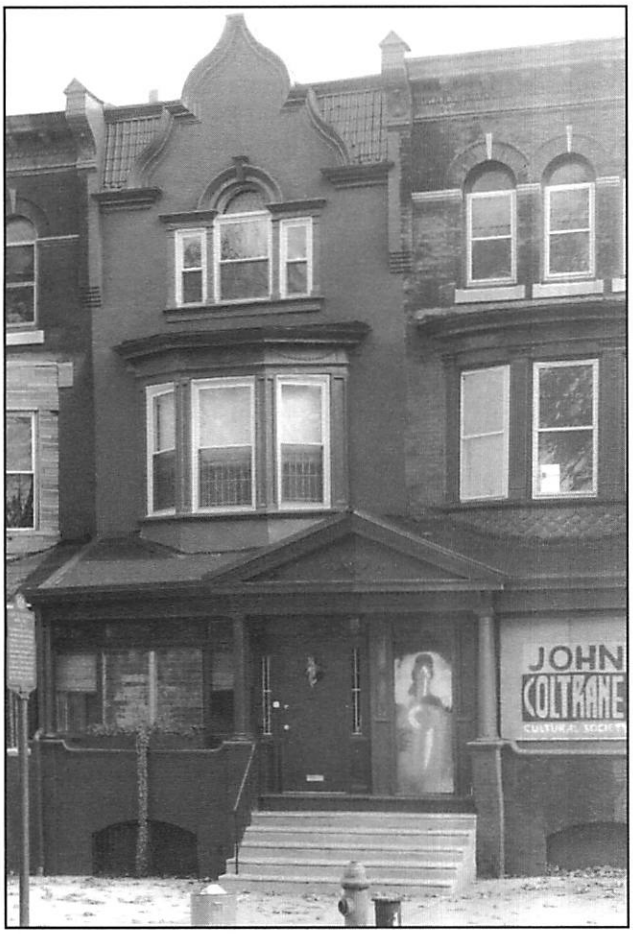


Figure 3. John Coltrane House. Photograph by Ralph Lieberman.

create a suburb that is representative of a period of expansive suburbanization in Denver after World War II and one of a small and finite number of subdivisions nationwide based on architect-developer collaboration and modernistic principles of design. It received national acclaim by architectural and housing magazines and commendation of the prestigious Southwest Research Institute, which espoused quality of design for low-cost, efficient housing using modern materials and methods of design.

Dr. David Ames of the University of Delaware is writing a nationwide context on the suburbanization of America from 1830 to 1860 with the National Register to encourage the development of contexts at local and metropolitan levels and to help evaluate suburbs for nomination. Dr. Ames is also working with us to complete a National Register Bulletin that focuses on the residential subdivision as a significant historic property type. The bulletin will provide a summary history of suburbanization and set forth guidelines for developing local contexts, implementing streamlined methods for survey, and making decisions about significance and integrity in neighborhoods.

The Raymond M. Hilliard Center Historic District in Chicago is another property noted for its historic role in community planning and development, as well as architecture. Bertrand Goldberg's modern style, five-building public housing complex with 710 residential apartments opened in 1966. The nomination contains citations that attest to the acclaim received by the complex. The reference to the building in the AIA's authoritative 1993 guide to Chicago architecture indicated the continuing high regard for the project by saying: "The revolutionary design theories that Goldberg developed for Marina City were applied here to the problem of public housing, creating what is still regarded as one of the city's best examples of humane high-rise living for local low-income families." The nomination claims that even as public housing policy turned away from high-rise developments, the Hilliard Center has seemed largely immune from the problems of other high-rise projects. While the Department of Housing and Urban Development transferred funds to the National Park Service, which worked with the National Conference of State Historic Preservation Officers to develop a context document with registration requirements for public housing constructed between 1935 and 1949, it is still necessary to evaluate later examples such as this one on an individual basis.

The National Park Service is taking the lead in establishing contexts for evaluation in other areas of significance as well. This year the Service will publish a theme study entitled *Racial Desegregation in Public Education* in the MPS format with context documentation and several nominations prepared as part of the study. It will be presented to the NPS Advisory Board to be considered for NHL designation. Coordinated by the NHL Survey and completed in partnership with the Organization of American Historians and the National Conference of State Historic Preservation Officers, this study tells the multi-ethnic story of racial desegregation in the United States from the 1840s through the early 1970s. It identifies property types and registration requirements for NHL designation and National Register listing for properties associated with this theme. This study will provide the context necessary to recognize additional resources beyond already designated NHLs, such as the Robert Russa Moton School associated with the Brown v. Board of Education of Topeka decision and the massive resistance to integration of public education in Prince Edward County, Virginia. The Service is also publishing a context document on NPS Mission 66 visitor centers as part of a multiyear study to provide the information necessary to evaluate the many visitor centers and other buildings and structures built

during this massive National Park Service construction program of the 1950s and 1960s.[4]

Beginning in 2000, the National Park Service is conducting a long-term research program to identify, evaluate, and recognize sites associated with civil rights, a theme worthy of a nationwide study. In the meantime a few places, such as Brown Chapel African Methodist Episcopal Church, headquarters for the Voting Rights Movement and starting place of the three Selma-to-Montgomery marches, have been designated NHLs. Other civil rights sites have been registered through such nominations as South Carolina's *Civil Rights Movement in Orangeburg County MPS*. Orangeburg County, with its black majority and a large population of college students, was a hotbed of the civil rights movement, the scene of grass roots African American protests against segregation and massive white resistance. The South Carolina State College Historic District in Orangeburg is listed as part of the MPS. Students at this historically black college participated in the sit-in movement of 1960 aimed at the desegregation of lunch counters at Orangeburg stores, the Orangeburg Movement of 1963–1964 to desegregate public accommodations and force local compliance with federal plans for desegregation, and the Orangeburg Massacre of 1968 in which three students were killed and twenty-eight others wounded when a state highway patrolman fired into a group of students in a confrontation between angry students and local law enforcement. The All Star Bowling Lanes is also listed under the context, because student protests and a violent confrontation in the parking lot against segregation of the bowling alley precipitated the Orangeburg Massacre.

The NPS has partnered with the Federal Highway Administration to produce a National Register travel itinerary on the National Register's section of the National Park Service website that describes, illustrates, and maps forty-one registered historic places and the Selma-to-Montgomery Trail associated with the struggle of African Americans for civil rights. The Federal Highway Administration is involved because the Department of Transportation has designated the Selma-to-Montgomery route an All American Road. The route has also been named an National Park Service-administered National Historic Trail. The National Register's *Discover Our Shared Heritage* travel itinerary series is one way the National Park Service makes information from the National Register files available to the public.

Historic places associated with other groups in American society forced to fight for civil rights are beginning to be documented, and more will be identified as part of the National Park Service's civil rights study. Stonewall in Greenwich Village, the site of the 1969 raid and demonstrations regarded by many as the single-most important event that led to the modern gay and lesbian liberation movement, was documented by several local organizations and nominated to the National Register by the New York State Historic Preservation Officer. After its listing, Stonewall was designated a NHL for the exceptional role it has played in the nation's history.

In the area of recent military history, the Cold War continues to be an important focus. Several launch complex sites have been listed as part of the *Titan ICBM Launch Complex Sites Associated with the 308th Strategic Missile Wing in Arkansas MPS*, and Alaska and Indiana have nominated individual examples of missile launch sites. Nominated by the Department of Energy, the Rocky Flats Plant in Golden, Colorado, was the sole producer of triggers for nuclear weapons from 1964 to 1989. The General Services Administration has turned to civil defense by nominating Building 710, Defense Civil Preparedness Agency, Region 6 Operations Center, constructed in 1969 as one of eight permanent federal regional operations centers built to withstand nuclear attack, and the Office of Civil Defense Emergency Operations Center at the Denver Federal Center, a bunker-like facility constructed in the early 1960s to provide shelter for state and local government officials in the event of attack. Also on the domestic front, the 1962 Abo Elementary School and Fallout Shelter in Artesia, New Mexico, is listed as the first, and perhaps the only, building in the United States constructed specifically for use as both an educational facility and fallout shelter. The Cold War is also the subject of one of the National Register's Teaching with Historic Places lesson plans featured on our website entitled *Thaw in the Cold War: Eisenhower and Khruschev at Gettysburg*. Another lesson plan in the series dealing with the recent past and featuring Little Rock High School, a NHL and a new unit of the National Park System, is entitled *From Canterbury to Little Rock: The Struggle for Educational Equality for African Americans*. These lesson plans, which use registered historic places to teach subjects in the core curriculum, are, with the travel itineraries, primary ways in which the National Register disseminates information about historic places for public education.

Sometimes the unprepossessing character of utilitarian buildings belies their exceptional significance, as occurred in the disputed National Register determination of eligibility for Building One at the United State Geological Survey (USGS) Field Center in Flagstaff, Arizona. The USGS staff had never considered the building to be historic because, as was pointed out in their letter requesting a determination of eligibility, the thirty-five-year-old building is younger than most of its occupants and an undistinguished and inexpensive construction. Building One was the first permanent headquarters and administrative center for the Branch of Astrogeology headed by Eugene Shoemaker during the time the program was involved in NASA's lunar missions (1962–1972). It is exceptionally significant in science for the work of this branch and for its association with Eugene Shoemaker who, according to the USGS obituary at his death quoted in the documentation, "was a legend of a man who almost singlehandedly created planetary science as a discipline distinct from astronomy. He brought together geologic principles to the mapping of planets, resulting in more than three decades of discoveries about the planets and asteroids of the solar system." The obituary also notes that Mr. Shoemaker was a 1992 recipient of the National Medal of Science, the highest scientific honor bestowed by the president of the United States.

The post-World War II commercial landscape underwent dramatic changes as reflected in the design of two early department stores—Bullock's Pasadena, an early suburban branch store and Wolf Wile in downtown Lexington, Kentucky. Wolf Wile, constructed in 1949–1950 in the International style, was an attempt to bring Modernism into downtown retail as businesses there were waning and relocating in outlying suburban areas. Characterized as "futuristic," "modernistic" and "swanky" at its inception, this collaborative sophisticated design by local architectural firm Frankel & Davis and the nationally recognized retail design firm of Amos Parrish & Company is a regionally unparalleled expression of International style retail. The downtown store remained the headquarters for the family-owned business until its closing in 1992. On the other hand, the almost contemporary 1947 Bullock's Pasadena is an outstanding integration of retail planning, architecture, and landscape design in the newly expanding suburbs. The Late Moderne style complex is an innovative and precedent-setting work by the important regional and national architects Walter Wurdeman and Welton Beckett, which inaugurated the firm's prominent role in the design of stores, shopping centers, and malls in the post-World War II era.

The domestic suburban landscape of the recent past is well represented in several individual residences. The Sunny and Ralph Wilson, Sr., House in Temple, Texas, is an exemplary example of the ubiquitous suburban ranch house with an exceptionally important interior. Built as the home of Ralph Wilson, Sr., the founder of Ralph Wilson Plastics, one of the largest manufacturers of laminates in North America, it also served as a model for the products of his emerging company. Consequently, it was used during his residence from 1959 to 1966 to display products, demonstrate their diverse uses for the modern home, and test their durability in a domestic setting. The house is recognized for its architectural importance and its pivotal role in invention for promoting laminates as a prolific mid-twentieth-century building material (Figure 4).

Representing another facet of the rapidly changing, thus highly threatened, suburban commercial landscape, is the Kahiki, a 1961 Polynesian style restaurant in Columbus, Ohio. The nomination context documents this theme restaurant's recent importance and fragility as a highly intact example of its type constructed during the heyday of the Polynesian restaurant craze. This exuberantly decorated and furnished building is a superb embodiment of the American post-World War II fascination with Polynesian culture that was manifested in a variety of entertainment and recreational activities from restaurants to music and movies. The property has been recently purchased by Walgreens, which is planning to demolish it by year's end, apparently making an exception to a stated company policy not to demolish National Register-listed properties[5] (Figure 5).

The history and architecture of the American road and its commercial roadside landscape is reflected variously by several additional listings including highway segments, automobile showrooms, parking garages, gas stations, motels, and diners. Recently, eleven diners have been added to the Register under statewide diner MPS contexts for Virginia and Massachusetts, bringing the total number of registered diners to nineteen. The 1961–1962 Snow Flake Motel, located south of St. Joseph, Michigan, along the Red Arrow Highway, is recognized for its modernistic snow crystal shape plan and its provision of luxurious room appointments at the time, such as



Figure 4. Historic interior photo of the Wilson House, circa 1960, used in Ralph Wilson Plastics Company advertising. Photographer unknown.

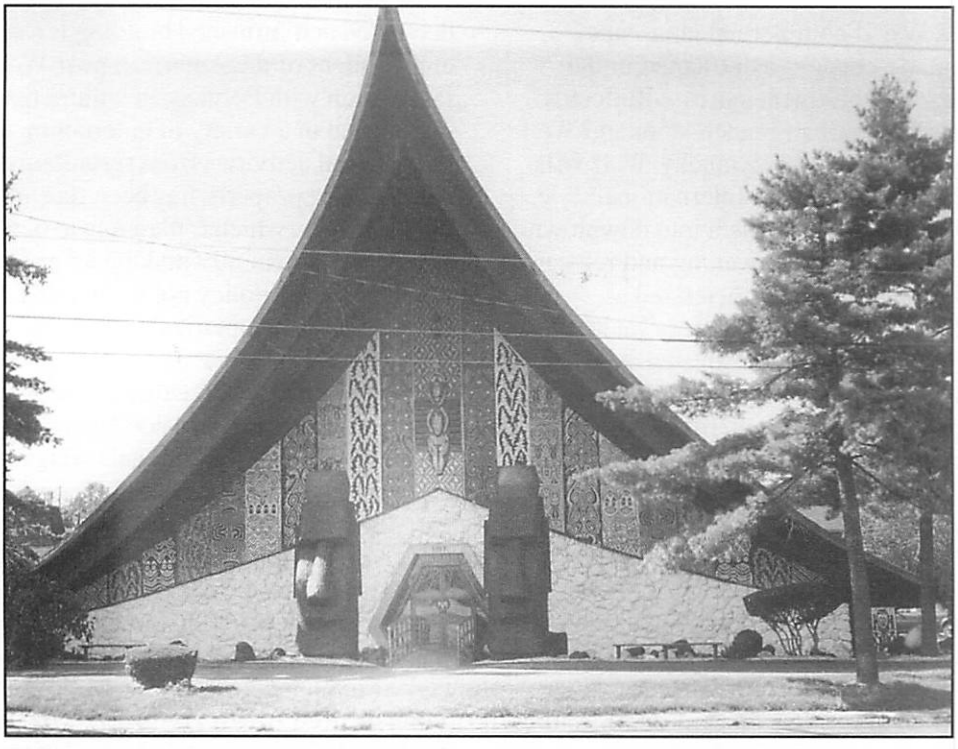


Figure 5. The Kahiki. Photograph by Jen Copeland and Nathalie Wright.

color television and individual icemakers. The Wrightian design of William Wesley Peters, Frank Lloyd Wright's son-in-law and quintessential apprentice, the building was being rehabilitated under new ownership at the time of its nomination after a period of some decline. The Arkansas Highway History and Architecture MPS documents historic contexts and a range of related property types for the period from 1910 through 1965, although properties from the later period have yet to be nominated. A statewide MPS nomination for Drive-In Theaters in South Dakota is currently under development. In addition, this year the National Park Service is conducting a congressionally mandated initial study of the historic and cultural significance of the Lincoln Highway, one of the earliest paved transcontinental highways in the United States, and its associated cultural resources.

When one thinks of exploration and settlement as a theme, one probably rarely thinks of the recent past, except, perhaps, for associations with space exploration or if one visits Bettles Field, Alaska, where the town's sign welcomes you to a location thirty-five miles north of the Arctic Circle, population sixty-three. While there one could stay at the listed Bettles Lodge, which consists of the first two permanent buildings built in 1948 and 1951 in this isolated northern Alaska community. These buildings are an excellent illustration of the earliest commercial transportation development in the interior of the state after World War II. In the area of oil exploration, the Prudhoe Bay Oil Field Discovery Well Site in North Slope, Alaska, marks the location of the initial efforts at unleashing the United States' largest natural oil reserve. Its 1967–1968 discovery has influenced regional, national, and international economic development in the industry.

As demonstrated by the examples in this paper, the National Register criteria for evaluation are relatively broad and can be flexibly applied to a wide variety of resources to argue convincingly for their exceptional importance. The National Park Service and our preservation partners are addressing many of the difficult issues involved in evaluating the historical impact of properties from the recent past, but there remains much yet to be done. In partnerships with the preservation community, the Service must strive to recognize and foster scholarship on topics in recent history, facilitate the development of more comparative historic contexts concerning evaluating and nominating properties from the period, and disseminate documentation and update technical guidance regarding the evaluation of properties registered for their exceptional importance. We owe it to the public to provide leadership in these areas to meet this critical preservation challenge of the twentieth century.

Notes

[1] Carol D. Shull and Beth L. Savage, "Trends in Recognizing Places for Significance in the Recent Past," Slaton, Deborah and Rebecca A. Shiffer, eds., *Preserving the Recent Past* (Washington, D.C.: Historic Preservation Education Foundation, 1995), II-3–II-14.

[2] Unless otherwise noted, the information presented in this paper on individual properties is derived from the National Register or National Historic Landmark files, which are cited in the sources section.

[3] See <www.cr.nps.gov/nr>.

[4] Sarah Allaback, *Mission 66 Visitor Centers: The History of a Building Type*, (Washington, D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 2000).

[5] "Walgreens Sinks Kahiki: Doors Close August 25th," *Society for Commercial Archeology News* 8, no.1 (Spring 2000): 1.

Sources

For further information on any of these properties, please contact the National Register reference desk at 202/343-9559 or at nr_reference@nps.gov. These references are arranged in order of the appearance of the properties in the paper.

Philip Johnson's Glass House, New Canaan, Fairfield County, Connecticut; prepared by Bruce Clouette and Hoang Tinh. NHL

Walter Gropius House, Lincoln, Middlesex County, Massachusetts; prepared by Anne Grady. NHL

Promontory Apartments, Chicago, Cook County, Illinois; prepared by Anthony P. Amarose, Pao-Chi Chang, and Alfred Swenson. NR

Mies van der Rohe Residential District and Lafayette Park, Detroit, Wayne County, Michigan: prepared by Sarah Evans. NR

General Motors Technical Center, Warren, Macomb County, Michigan; prepared by Claudia Kavenagh, Nicole Stull, and Michael Kelleher. NR

Simms Building, Albuquerque, Bernalillo County, New Mexico; prepared by Krista Lee Armstrong. NR

American Zinc, Lead and Smelting Company Building, St. Louis (independent city), Missouri; prepared by Esley Hamilton, Doris A. Danna, and Steven E. Mitchell. NR

Reynolds Metals Company International Headquarters, Richmond, Henrico County, Virginia; prepared by Mary Harding Sadler and Peter McDearmon Witt. NR

Lustron Houses in Georgia MPS; prepared by Lisa Raflo. NR

Lustron Houses in South Dakota MPS; prepared by Nora B. Frederick. NR

Irwin Union Bank, *Miller House*, *North Christian Church* and *First Baptist Church* are individual components of *Modernism in Architecture, Landscape Architecture, Design and Art in Bartholomew County, Indiana, 1942–1965 MPS;* prepared by Laura Thayer, Louis Joyner, and Malcolm Cairns. NHL

Thorncrown Chapel and the *E. Fay and Gus Jones House* are individual components of *The Arkansas Designs of E. Fay Jones, Architect, 1956–1997 MPS*; prepared by Helen A. Barry and Cheryl Griffith Nichols. NR

Georgia O'Keefe Home and Studio, Abiquiu, Rio Arriba County, New Mexico; prepared by Sarah L. Burt. NHL

Olson House, South Cushing, Knox County, Maine; prepared by Kirk F. Mohney. NR

Rothko Chapel, Houston, Harris County, Texas; prepared by Marta McBride Galicki, Stephen Fox, and Gregory Smith. NR

Genaro P. and Carolina Briones House in the *East Austin MRA*; prepared by Gregory Smith. NR

Grandma Prisbrey's Bottle Village, Simi Valley, Ventura County, California; prepared by Daniel Dereck Paul. NR

Ed Galloway's Totem Pole Park, Foyil, Rogers County, Oklahoma; prepared by Dianna Everett. NR

John Coltrane House, Philadelphia, Philadelphia County, Pennsylvania; prepared by Michael J. Lewis. NHL

Victory Grill, Austin, Travis County, Texas; prepared by Karen D. Riles. NR

Arapahoe Acres, Englewood, Arapahoe County, Colorado; prepared by Diane Wray. NR

Raymond M. Hilliard Center Historic District, Chicago, Cook County, Illinois; prepared by Daniel Bluestone. NR

Robert Russa Moton High School, Farmville, Prince Edward County, Virginia; prepared by Jarl K. Jackson and Julie L. Vosmik. NHL

Brown Chapel African Methodist Episcopal Church, Selma, Dallas County, Alabama; prepared by Cecil N. McKithan. NHL

South Carolina State College Historic District and the *All Star Bowling Lanes* are individual components of the *Civil Rights Movement in Orangeburg County, South Carolina MPS*; prepared by Steven A. Davis. NR

Stonewall, New York, New York County, New York; prepared by David Carter, Andrew Scott Dolkart, Gale Harris, and Jay Shockly. NR/NHL

Titan ICBM Launch Complex Sites Associated with the 308th Strategic Missile Wing in Arkansas MPS; prepared by Mark Christ and David Stumpf. NR

Rocky Flats Plant, Golden, Jefferson County, Colorado; prepared by Patricia Powell and Jayne Aaron. NR

Building 710, Defense Civil Preparedness Agency, Region 6 Operations Center and the *Office of Civil Defense Emergency Operations Center*, Lakewood, Jefferson County, Colorado; prepared by Karen Waddell. NR

Abo Elementary School and Fallout Shelter, Artesia, Eddy County, New Mexico; prepared by Nancy Dunn and James Hewat. NR

Building One, USGS Campus, Flagstaff, Prescott County, Arizona; prepared by L. Sue Beard. NRDOE

Bullock's Pasadena, Pasadena, Los Angeles County, California; prepared by Alan Hess, Leslie Heumann, and Maggie Valentine. NR

Wolf Wile Department Store Building, Lexington, Fayette County, Kentucky; prepared by Patrick Lucas. NR

Sunny and Ralph Wilson, Sr., House, Temple, Bell County, Texas; prepared by Grace Jeffers. NR

The Kahiki, Columbus, Franklin County, Ohio; prepared by Nathalie L. Wright. NR

Diners of Virginia MPS; prepared by Marc C. Wagner. NR

Diners of Massachusetts MPS; prepared by Kathleen Kelly Broomer and Betsy Friedberg. NR

Snow Flake Motel, Lincoln Township, Berrien County, Michigan; prepared by Glory-June Greiff. NR

Bettles Lodge, Bettles, Yukon-Koyukuk Borough-Census Area, Alaska; prepared by Dan and Lynda Klaes. NR

Prudhoe Bay Oil Field Discovery Well Site, North Slope, Alaska; prepared by Christopher B. Wooley. NR

The Secretary of the Interior's Standards for the Treatment of Historic Properties

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Introduction

Choosing an Appropriate Treatment for the Historic Building

The Standards are neither technical nor prescriptive, but are intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources. For example, they cannot, in and of themselves, be used to make essential decisions about which features of the historic building should be saved and which can be changed. But once a treatment is selected, the Standards provide philosophical consistency to the work.
Choosing the most appropriate treatment for a building requires careful decision-making about a building's historical significance, as well taking into account a number of other considerations:

Relative importance in history. Is the building a nationally significant resource—a rare survivor or the work of a master architect or craftsman? Did an important event take place in it? National Historic Landmarks designated for their "exceptional significance in American history," or many buildings individually listed in the National Register, often warrant *Preservation* or *Restoration*. Buildings that contribute to the significance of a historic district but are not individually listed in the National Register more frequently undergo *Rehabilitation* for a compatible new use.

Physical condition. What is the existing condition—or degree of material integrity—of the building prior to work? Has the original form survived largely intact or has it been altered over time? Are the alterations an important part of the building's history? *Preservation* may be appropriate if distinctive materials, features, and spaces are essentially intact and convey the building's historical significance. If the building requires more extensive repair and replacement, or if alterations or additions are necessary for a new use, then *Rehabilitation* is probably the most appropriate treatment. These key questions play major roles in determining what treatment is selected.

Proposed use. An essential, practical question to ask is: Will the building be used as it was historically or will it be given a new use? Many historic buildings can be adapted for new uses without seriously damaging their historic character; special-use properties such as grain silos, forts, ice houses, or windmills may be extremely difficult to adapt to new uses without major intervention and a resulting loss of historic character and even integrity.

Mandated code requirements. Regardless of the treatment, code requirements will need to be taken into consideration. But if hastily or poorly designed, a series of code-required actions may jeopardize a building's materials as well as its historic character. Thus, if a building needs to be seismically upgraded,

modifications to the historic appearance should be minimal. Abatement of lead paint and asbestos within historic buildings requires particular care if important historic finishes are not to be adversely affected. Finally, alterations and new construction needed to meet accessibility requirements under the Americans with Disabilities Act of 1990 should be designed to minimize material loss and visual change to a historic building.

Using the Standards and Guidelines

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings are intended to provide guidance to historic building owners and building managers, preservation consultants, architects, contractors, and project reviewers prior to treatment.

As noted, while the treatment Standards are designed to be applied to *all* historic resource types included in the National Register of Historic Places—buildings, sites, structures, districts, and objects—the Guidelines apply to *specific* resource types; in this case, buildings.

The Guidelines have been prepared to assist in applying the Standards to all project work; consequently, they are not meant to give case-specific advice or address exceptions or rare instances. Therefore, it is recommended that the advice of qualified historic preservation professionals be obtained early in the planning stage of the project. Such professionals may include architects, architectural historians, historians, historical engineers, archeologists, and others who have experience in working with historic buildings.

The Guidelines pertain to both exterior and interior work on historic buildings of all sizes, materials, and types. Approaches to work treatments and techniques are identified as consistent with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* ("Recommended") or inconsistent with the Standards ("Not Recommended") in the complete publication.

The Standards for the first treatment, *Preservation,* require retention of the greatest amount of historic fabric, along with the building's historic form, features, and detailing as they have evolved over time. The *Rehabilitation* Standards acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character. The *Restoration* Standards allow for the depiction of a building at a particular time in its history by preserving materials from the period of significance and removing materials from other periods. The *Reconstruction* Standards establish a limited framework for re-creating a vanished or non-surviving building with new materials, primarily for interpretive purposes.

The Guidelines are preceded by a brief historical overview of the primary historic building materials (masonry, wood, and architectural metals) and their diverse uses over time. Next, building features comprised of these materials are discussed, beginning with the exterior, then moving to the interior. Special requirements or work that must be done to meet accessibility requirements, health and safety code requirements, or retrofitting to improve energy efficiency are also addressed here. Although usually not part of the overall process of protecting historic buildings, this work must also be assessed for its potential impact on a historic building.

Standards for Preservation

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Standards for Preservation

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.

2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Applying the Standards for Preserving Historic Buildings

In **Preservation**, the options for replacement are less extensive than in the treatment, Rehabilitation. This is because it is assumed at the outset that building materials and character-defining features are essentially intact, i.e., that more historic fabric has survived, unchanged over time. The expressed goal of the **Standards for Preservation** and **Guidelines for Preserving Historic Buildings** is retention of the building's existing form, features and detailing. This may be as simple as basic maintenance of existing materials and features or may involve preparing a historic structure report, undertaking laboratory testing such as paint and mortar analysis, and hiring conservators to perform sensitive work such as reconstituting interior finishes. Protection, maintenance, and repair are emphasized while replacement is minimized.

Identify, Retain, and Preserve Historic Materials and Features

The guidance for the treatment **Preservation** begins with recommendations to identify the form and detailing of those architectural materials and features that are important in defining the building's historic character and which must be retained in order to preserve that character. Therefore, guidance on ***identifying, retaining, and preserving*** character-defining features is always given first. The character of a historic building may be defined by the form and detailing of exterior materials, such as masonry, wood, and metal; exterior features, such as roofs, porches, and windows; interior materials, such as plaster and paint; and interior features, such as moldings and stairways, room configuration and spatial relationships, as well as structural and mechanical systems; and the building's site and setting.

Stabilize Deteriorated Historic Materials and Features as a Preliminary Measure

Deteriorated portions of a historic building may need to be protected through preliminary stabilization measures until additional work can be undertaken. ***Stabilizing*** may include structural reinforcement, weatherization, or correcting unsafe conditions. Temporary stabilization should always be carried out in such a manner that it detracts as little as possible from the historic building's appearance. Although it may not be necessary in every preservation project, stabilization is nonetheless an integral part of the treatment Preservation; it is equally applicable, if circumstances warrant, for the other treatments.

Protect and Maintain Historic Materials and Features

After identifying those materials and features that are important and must be retained in the process of **Preservation** work, then ***protecting and maintaining*** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes the maintenance of historic materials through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coatings; the cyclical cleaning of roof gutter systems; or installation of fencing, alarm systems and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

Repair (Stabilize, Consolidate, and Conserve) Historic Materials and Features

Next, when the physical condition of character-defining materials and features requires additional work, ***repairing*** by ***stabilizing, consolidating, and conserving*** is recommended. **Preservation** strives to retain existing materials and features while employing as little new material as possible. Consequently, guidance for repairing a historic material, such as masonry, again begins with the least degree of intervention possible such as strengthening fragile materials through consolidation, when appropriate, and repointing with mortar of an appropriate strength. Repairing masonry as well as wood and architectural metal features may also include patching, splicing, or otherwise reinforcing them using recognized preservation methods. Similarly, within the treatment **Preservation**, portions of a historic structural system could be reinforced using contemporary materials such as steel rods. All work should be physically and visually compatible, identifiable upon close inspection and documented for future research.

Limited Replacement In Kind of Extensively Deteriorated Portions of Historic Features

If repair by stabilization, consolidation, and conservation proves inadequate, the next level of intervention involves the ***limited replacement in kind*** of extensively deteriorated or missing *parts* of features when there are surviving prototypes (for example, brackets, dentils, steps, plaster, or portions of slate or tile roofing). The replacement material needs to match the old both physically and visually, i.e., wood with wood, etc. Thus, with the exception of hidden structural reinforcement and new mechanical system components, substitute materials are not appropriate in the treatment **Preservation**. Again, it is important that all new material be identified and properly documented for future research.

If prominent features are missing, such as an interior staircase, exterior cornice, or a roof dormer, then a Rehabilitation or Restoration treatment may be more appropriate.

Energy Efficiency/Accessibility Considerations/Health and Safety Code Considerations

These sections of the **Preservation** guidance address work done to meet accessibility requirements and health and safety code requirements; or limited retrofitting measures to improve energy efficiency. Although this work is quite often an important aspect of preservation projects, it is usually not part of the overall process of protecting, stabilizing, conserving, or repairing character-defining features; rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to obscure, damage, or destroy character-defining materials or features in the process of undertaking work to meet code and energy requirements.

Standards for Rehabilitation

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner so that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Applying the Standards for Rehabilitating Historic Buildings

In **Rehabilitation**, historic building materials and character-defining features are protected and maintained as they are in the treatment Preservation; however, an assumption is made prior to work that existing historic fabric has become damaged or deteriorated over time and, as a result, more repair and replacement will be required. Thus, latitude is given in the **Standards for Rehabilitation and Guidelines for Rehabilitation** to replace extensively deteriorated, damaged, or missing features using either traditional or substitute materials. Of the four treatments, only **Rehabilitation** includes an opportunity to make possible an efficient contemporary use through alterations and additions.

Identify, Retain, and Preserve Historic Materials and Features

Like Preservation, guidance for the treatment **Rehabilitation** begins with recommendations to identify the form and detailing of those architectural materials and features that are important in defining the building's historic character and which must be retained in order to preserve that character. Therefore, guidance on ***identifying, retaining, and preserving*** character-defining features is always given first. The character of a historic building may be defined by the form and detailing of exterior materials, such as masonry, wood, and metal; exterior features, such as roofs, porches, and windows; interior materials, such as plaster and paint; and interior features, such as moldings and stairways, room configuration and spatial relationships, as well as structural and mechanical systems.

Protect and Maintain Historic Materials and Features

After identifying those materials and features that are important and must be retained in the process of **Rehabilitation** work, then ***protecting and maintaining*** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes the maintenance of historic material through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coatings; the cyclical cleaning of roof gutter systems; or installation of fencing, alarm systems and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

Repair Historic Materials and Features

Next, when the physical condition of character-defining materials and features warrants additional work, ***repairing*** is recommended. **Rehabilitation** guidance for the repair of historic materials such as masonry, wood, and architectural metals again begins with the least degree of intervention possible such as patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading them according to recognized preservation methods. Repairing also includes the limited replacement in kind—or with compatible substitute material—of extensively deteriorated or missing *parts* of features when there are surviving prototypes (for example, brackets, dentils, steps, plaster, or portions of slate or tile roofing). Although using the same kind of material is always the preferred option, substitute material is acceptable if the form and design as well as the substitute material itself conveys the visual appearance of the remaining parts of the feature and finish.

Replace Deteriorated Historic Materials and Features

Following repair in the hierarchy, **Rehabilitation** guidance is provided for ***replacing*** an entire character-defining feature with new material because the level of deterioration or damage of materials precludes repair (for example, an exterior cornice; an interior staircase; or a complete porch or storefront). If the essential form and detailing are

still evident so that the physical evidence can be used to re-establish the feature as an integral part of the rehabilitation, then its replacement is appropriate. Like the guidance for repair, the preferred option is always replacement of the entire feature in kind, that is, with the same material. Because this approach may not always be technically or economically feasible, provisions are made to consider the use of a compatible substitute material.

It should be noted that, while the National Park Service guidelines recommend the replacement of an entire character-defining feature that is extensively deteriorated, they *never* recommend removal and replacement with new material of a feature that—although damaged or deteriorated—could reasonably be repaired and thus preserved.

Design for the Replacement of Missing Historic Features

When an entire interior or exterior feature is missing (for example, an entrance, or cast iron facade; or a principal staircase), it no longer plays a role in physically defining the historic character of the building unless it can be accurately recovered in form and detailing through the process of carefully documenting the historical appearance. Although accepting the loss is one possibility, where an important architectural feature is missing, its replacement is always recommended in the **Rehabilitation** guidelines as the *first* or preferred, course of action. Thus, if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced, and if it is desirable to re-establish the feature as part of the building's historical appearance, then designing and constructing a new feature based on such information is appropriate. However, a *second* acceptable option for the replacement feature is a new design that is compatible with the remaining character-defining features of the historic building. The new design should always take into account the size, scale, and material of the historic building itself and, most importantly, should be clearly differentiated so that a false historical appearance is not created.

Alterations/Additions for the New Use

Some exterior and interior alterations to a historic building are generally needed to assure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include providing additional parking space on an existing historic building site; cutting new entrances or windows on secondary elevations; inserting an additional floor; installing an entirely new mechanical system; or creating an atrium or light well. Alteration may also include the selective removal of buildings or other features of the environment or building site that are intrusive and therefore detract from the overall historic character.

The construction of an exterior addition to a historic building may seem to be essential for the new use, but it is emphasized in the **Rehabilitation** guidelines that such new additions should be avoided, if possible, and considered *only* after it is determined that those needs cannot be met by altering secondary, i.e., non character-defining interior spaces. If, after a thorough evaluation of interior solutions, an exterior addition is still judged to be the only viable alternative, it should be designed and constructed to be clearly differentiated from the historic building and so that the character-defining features are not radically changed, obscured, damaged, or destroyed.
Additions and alterations to historic buildings are referenced within specific sections of the **Rehabilitation** guidelines such as Site, Roofs, Structural Systems, etc., but are addressed in detail in *New Additions to Historic Buildings*; (see publication from which this text is excerpted).

Energy Efficiency/Accessibility Considerations/Health and Safety Code Considerations

These sections of the guidance address work done to meet accessibility requirements and health and safety code requirements, or retrofitting measures to improve energy efficiency. Although this work is quite often an important aspect of **Rehabilitation** projects, it is usually not a part of the overall process of protecting or repairing character-defining features; rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to radically change, obscure, damage, or destroy character-defining materials or features in the process of meeting code and energy requirements.

Standards for Restoration

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Standards for Restoration

1. A property will be used as it was historically or be given a new use, which reflects the property's restoration period.

2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces, and spatial relationships that characterize the period will not be undertaken.

3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Materials, features, spaces, and finishes that characterize other historical periods will be documented prior to their alteration or removal.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.

6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.

7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.

8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

10. Designs that were never executed historically will not be constructed.

Applying the Standards for Restoring Historic Buildings

Rather than maintaining and preserving a building as it has evolved over time, the expressed goal of the **Standards for Restoration and Guidelines for Restoring Historic Buildings** is to make the building appear as it did at a particular—and most significant—time in its history. First, those materials and features from the "restoration period" are identified, based on thorough historical research. Next, features from the restoration period are maintained, protected, repaired (i.e., stabilized, consolidated, and conserved), and replaced, if necessary. As opposed to other treatments, the scope of work in **Restoration** can include removal of features from other periods; missing features from the restoration period may be replaced, based on documentary and physical evidence, using traditional materials or compatible substitute materials. The final guidance emphasizes that only those designs that can be documented as having been built should be re-created in a restoration project.

Identify, Retain, and Preserve Materials and Features from the Restoration Period

The guidance for the treatment **Restoration** begins with recommendations to identify the form and detailing of those existing architectural materials and features that are significant to the restoration period as established by historical research and documentation. Thus, guidance on ***identifying, retaining, and preserving*** features from the restoration period is always given first. The historic building's appearance may be defined by the form and detailing of its exterior materials, such as masonry, wood, and metal; exterior features, such as roofs, porches, and windows; interior materials, such as plaster and paint; and interior features, such as moldings and stairways, room configuration and spatial relationships, as well as structural and mechanical systems; and the building's site and setting.

Protect and Maintain Materials and Features from the Restoration Period

After identifying those existing materials and features from the restoration period that must be retained in the process of **Restoration** work, then ***protecting and maintaining*** them is addressed. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes the maintenance of historic materials through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coatings; the cyclical cleaning of roof gutter systems; or installation of fencing, alarm systems, and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

Repair (Stabilize, Consolidate, and Conserve) Materials and Features from the Restoration Period

Next, when the physical condition of restoration period features requires additional work, ***repairing*** by ***stabilizing, consolidating, and conserving*** is recommended. **Restoration** guidance focuses upon the preservation of those materials and features that are significant to the period. Consequently, guidance for repairing a historic material, such as masonry, again begins with the least degree of intervention possible, such as strengthening fragile materials through consolidation, when appropriate, and repointing with mortar of an appropriate strength. Repairing masonry as well as wood and architectural metals includes patching, splicing, or otherwise reinforcing them using recognized preservation methods. Similarly, portions of a historic structural system could be reinforced using contemporary material such as steel rods. In **Restoration**, repair may also include the limited replacement in kind—or with compatible substitute material—of extensively deteriorated or missing parts of existing features when there are surviving prototypes to use as a model. Examples could include terra-cotta brackets, wood balusters, or cast iron fencing.

Replace Extensively Deteriorated Features from the Restoration Period

In **Restoration**, ***replacing*** an entire feature from the restoration period (i.e., a cornice, balustrade, column, or stairway) that is too deteriorated to repair may be appropriate. Together with documentary evidence, the form and detailing of the historic feature should be used as a model for the replacement. Using the same kind of material is preferred; however, compatible substitute materials may be considered. All new work should be unobtrusively dated to guide future research and treatment.

If documentary and physical evidence are not available to provide an accurate re-creation of missing features, the treatment Rehabilitation might be a better overall approach to project work.

Remove Existing Features from Other Historic Periods

Most buildings represent continuing occupancies and change over time, but in **Restoration**, the goal is to depict the building as it appeared at the most significant time in its history. Thus, work is included to remove or alter existing historic features that do not represent the restoration period. This could include features such as windows, entrances and doors, roof dormers, or landscape features. Prior to altering or removing materials, features, spaces, and finishes that characterize other historical periods, they should be documented to guide future research and treatment.

Re-Create Missing Features from the Restoration Period

Most **Restoration** projects involve re-creating features that were significant to the building at a particular time, but are now missing. Examples could include a stone balustrade, a porch, or cast iron storefront. Each missing feature should be substantiated by documentary and physical evidence. Without sufficient documentation for these "re-creations," an accurate depiction cannot be achieved. Combining features that never existed together historically can also create a false sense of history. Using traditional materials to depict lost features is always the preferred approach; however, using compatible substitute material is an acceptable alternative in **Restoration** because, as emphasized, the goal of this treatment is to replicate the "appearance" of the historic building at a particular time, not to retain and preserve all historic materials as they have evolved over time.

If documentary and physical evidence are not available to provide an accurate re-creation of missing features, the treatment Rehabilitation might be a better overall approach to project work.

Energy Efficiency/Accessibility Considerations/Health and Safety Code Considerations

These sections of the **Restoration** guidance address work done to meet accessibility requirements and health and safety code requirements; or limited retrofitting measures to improve energy efficiency. Although this work is quite often an important aspect of restoration projects, it is usually not part of the overall process of protecting, stabilizing, conserving, or repairing features from the restoration period; rather, such work is assessed for its potential negative impact on the building's historic appearance. For this reason, particular care must be taken not to obscure, damage, or destroy historic materials or features from the restoration period in the process of undertaking work to meet code and energy requirements.

Please refer to the complete publication for the **Standards for Reconstruction** and **Guidelines for Reconstructing Historic Buildings.**



Ralph Rapson, Modernist

Jane King Hession
Co-author, Ralph Rapson: Sixty Years of Modern Design
Eden Prairie, Minnesota

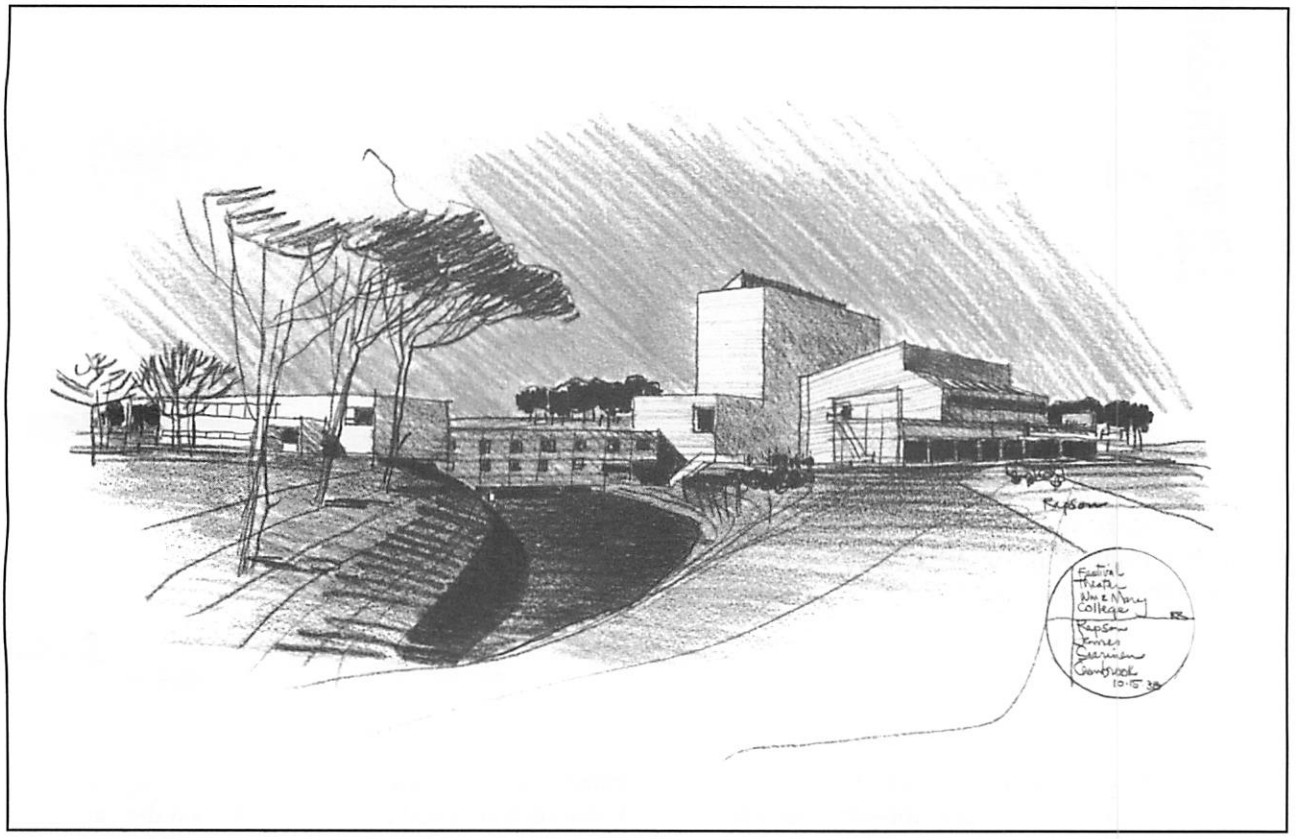
For over sixty years, Ralph Rapson, FAIA—architect, designer, artist, educator—has been a major figure in story of twentieth-century architecture and design. Among the first U.S. born architects to embrace modern design principles, Rapson was a leading proponent of the dissemination of modernism during the depression and postwar years.

He received his formative architectural training at the University of Michigan, receiving his B.Arch. in 1938. At the time, Michigan was one of the few American architectural schools that had made the break with a strictly classical, Beaux-Arts curriculum. Rapson became a modernist. While at Michigan, his design work came to the attention of architect and city planner Eliel Saarinen, who offered Rapson a scholarship to pursue further studies at nearby Cranbrook Academy of Art, the remarkable new school he had founded in Bloomfield Hills, Michigan.

Saarinen had recruited an outstanding group of Scandinavian and European modernists for his Cranbrook faculty, including his own son, architect Eero Saarinen, sculptor Carl Milles, ceramist Maija Grotell, painters Wallace Mitchell and Zoltan Sepeshky, metal craftsman Harry Bertoia, and fabric artists Marianne Strengell and Loja Saarinen. The students were no less extraordinary. Rapson's classmates included Charles Eames, Harry Weese, and Ben Baldwin, all of whom went on to notable careers of their own. The atelier atmosphere at Cranbrook fostered experimentation on the part of its students, and Rapson explored a variety of design media and disciplines. He applied his modernist sensibilities to all manner of objects and materials including flatware, teapots, lamps, fabric, dishes, jewelry, and most prolifically, furniture.

In 1942, Rapson was hired as head of architectural curriculum at the New Bauhaus (later the Institute of Design) in Chicago, by its director, László Moholy-Nagy. Rapson cites Moholy-Nagy, the Hungarian designer who came to Chicago from the Bauhaus in Germany where he had taught, as one of the most profound influences on his career. It was at the New Bauhaus that Rapson discovered his gift for and love of teaching and embarked on his dual career as architect and educator, which he would pursue for a full half century.

From the New Bauhaus, Rapson went to the Massachusetts Institute of Technology in 1946 where he became an assistant professor in the School of Architecture and Planning. In addition to his faculty responsibilities at MIT in the early forties, where he was known as a "brilliant teacher and studio critic," Rapson volunteered his time at the Boston Architectural Center (BAC). There he was instrumental in phasing out the Beaux-Arts program and instituting a modern curriculum. In 1954 Rapson became head of the University of Minnesota's School of Architecture and Landscape Architecture.

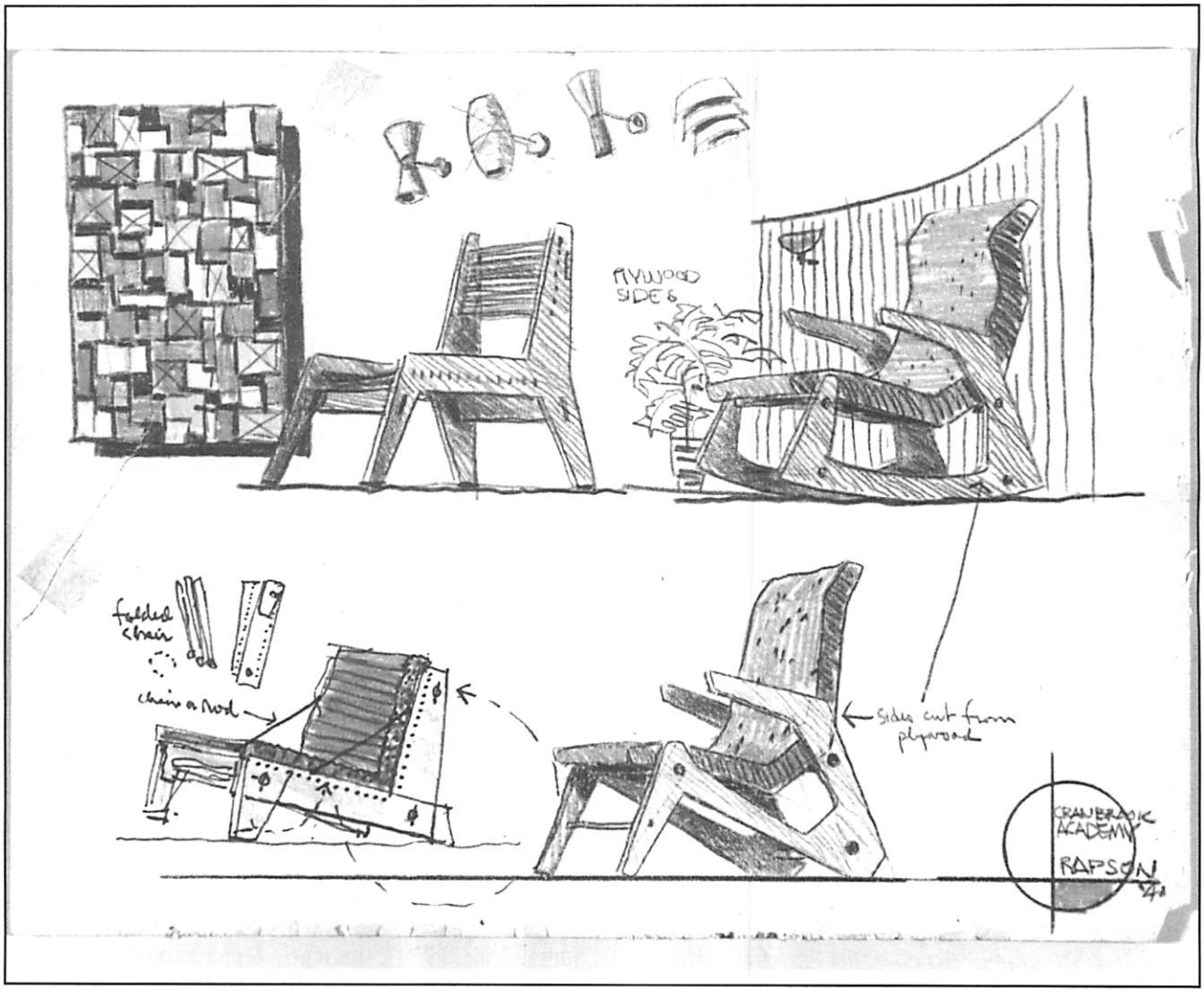


William and Mary Festival Theatre and Fine Arts Center (NB), 1938, Competition entry by Ralph Rapson, Eero Saarinen, and Fred James.

Rapson began to gain national attention during the Depression and war years, which were lean times for architects. Because harsh economic realities and wartime material restrictions severely limited new building and construction, many architects, including Rapson, developed and promoted their ideas through magazine and company-sponsored design competitions. Rapson participated in several of the most significant architectural competitions of the twentieth century. At age twenty-four, his first-place entry, with Eero Saarinen and Fred James, for the William and Mary Festival Theater and Fine Arts Center (1939) competition marked the first time a building of modern design was chosen for an American academic campus. Rapson's William and Mary sketches received national exposure when they toured the country and were displayed at the New York World's Fair as part of a Museum of Modern Art-generated exhibition. Rapson became famous for his "legendary hand," and his rapid, loose, lively rendering style, exemplified by the William and Mary drawings.

In 1945, at age thirty-one, he became the youngest of a group of nine architects, which included Richard Neutra, Eero Saarinen, William Wurster, and Charles and Ray Eames, to participate in *Arts & Architecture* magazine's Case Study House Program in Post War Housing. Although other participants chose expansive ocean-view lots for their sites, Rapson opted for a constricted urban lot that he challenged his design to improve. His critically acclaimed Case Study House #4, or the "Greenbelt House," featured a plan in which the public and private realms of the home were separated by an interior strip of planting, or a "greenbelt." Nature was brought into the flexible plan of the house, and view was created on a viewless lot. Although not built at the time, forty-four years later in 1989 the "Greenbelt House" was constructed as part of the exhibition "Blueprints for Modern Living: The History and Legacy of the Case House Program in Post War Housing," in 1989 at the Museum of Contemporary Art in Los Angeles.

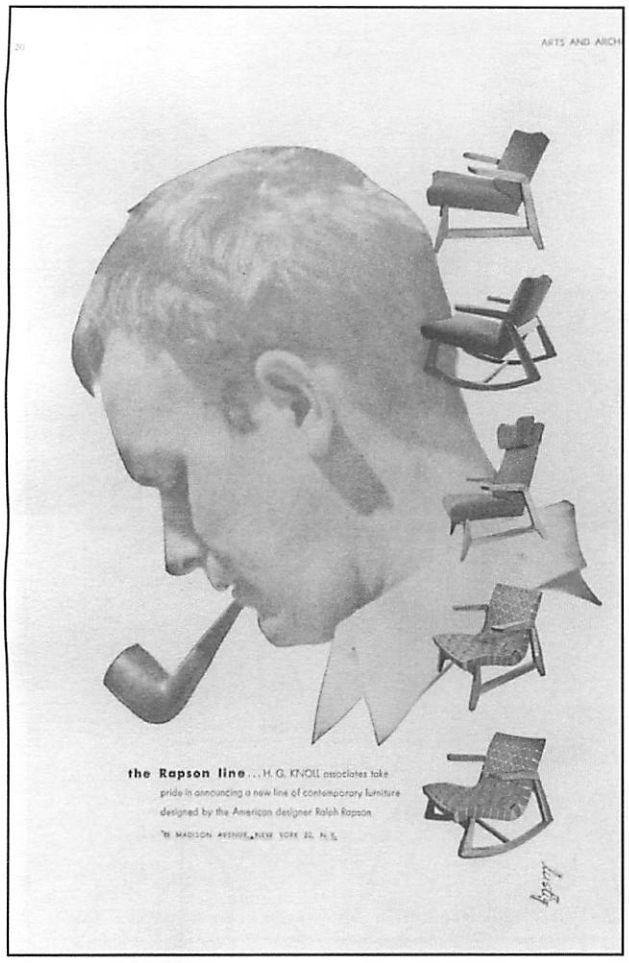
During the 1940s and 1950s, in addition to being a practicing architect and an architectural educator, Rapson was a prolific furniture designer. He produced hundreds of furniture designs of astonishing variety that made ingenious use of what were then technologically advanced materials such as bent plywood, aluminum, fiberglass, and foam rubber, which he would bring to life in whimsical perspective sketches. He was the first of several Cranbrook designers, followed by Charles Eames, Eero Saarinen, and Harry Bertoia, to be chosen by



Cranbrook Academy drawings, 1941.

Hans Knoll and Florence Schust (later Knoll) to design for H.G. Knoll Associates, a leading U.S. manufacturer of quality furniture and one of the first to produce modern furniture for the American mass market. "The Rapson Line," debuted in 1945 and was featured in a series of advertisements created by noted graphic designer Alvin Lustig. In 1950, Rapson and his wife Mary took on yet another venture when they opened Rapson Inc., in Boston, one of the first shops in the eastern United States dedicated to the showcasing and sale of furniture, textiles, and all manner of objects of modern design.

Rapson's friend and colleague, Hans Knoll, played an instrumental role in his next major undertaking. Knoll was under contract to the U.S. State Department's Foreign Buildings Operations (FBO) to provide furnishings for the American Embassy in Havana, which was then under construction. Knoll advised Rapson that Havana was one in a series of new embassies the FBO was planning, as part of the U.S. postwar diplomatic building boom. In 1951, Rapson was hired by the Foreign Buildings Operations to design a series of embassy projects being planned in Europe. The timing was fortunate for Rapson and his partner on the European venture, John Van der Meulen, a former University of Michigan classmate. The projects were well funded, constraints and directives from Washington minimal, and the architects enjoyed enormous design freedom. Charged with creating new facilities for the expanding diplomatic staffs in several European capitals, Rapson did not look to prewar embassy structures for precedents, but created an entirely new model for the American embassy, as exemplified by his United States Embassy Office Building in Stockholm (1954). Enclosed in a glass and aluminum skin, the embassy not only demonstrates the appropriateness of modern structural materials and systems to the design of diplomatic enclaves, but also functions efficiently as an office building. Rapson and Van der Meulen's embassies became the prototype for a new American embassy—one whose openness, accessibility, and modernity



Alvin Lustig advertisement for Knoll, showing the Rapson Line with a photograph of the designer, 1945 (Rapson Collection).

symbolized American diplomatic policy in the postwar years. In addition to the Stockholm embassy, Rapson designed eight other FBO projects abroad, including the U.S. Embassy in Copenhagen and embassy staff apartments in Boulogne, Neuilly, and LeHavre, France. In 1954, Rapson left the FBO and returned to MIT. Years later however, from 1983 to 1986, he was a member of the Architectural Advisory Panel, of the FBO, which was responsible for architect selection for new embassy projects.

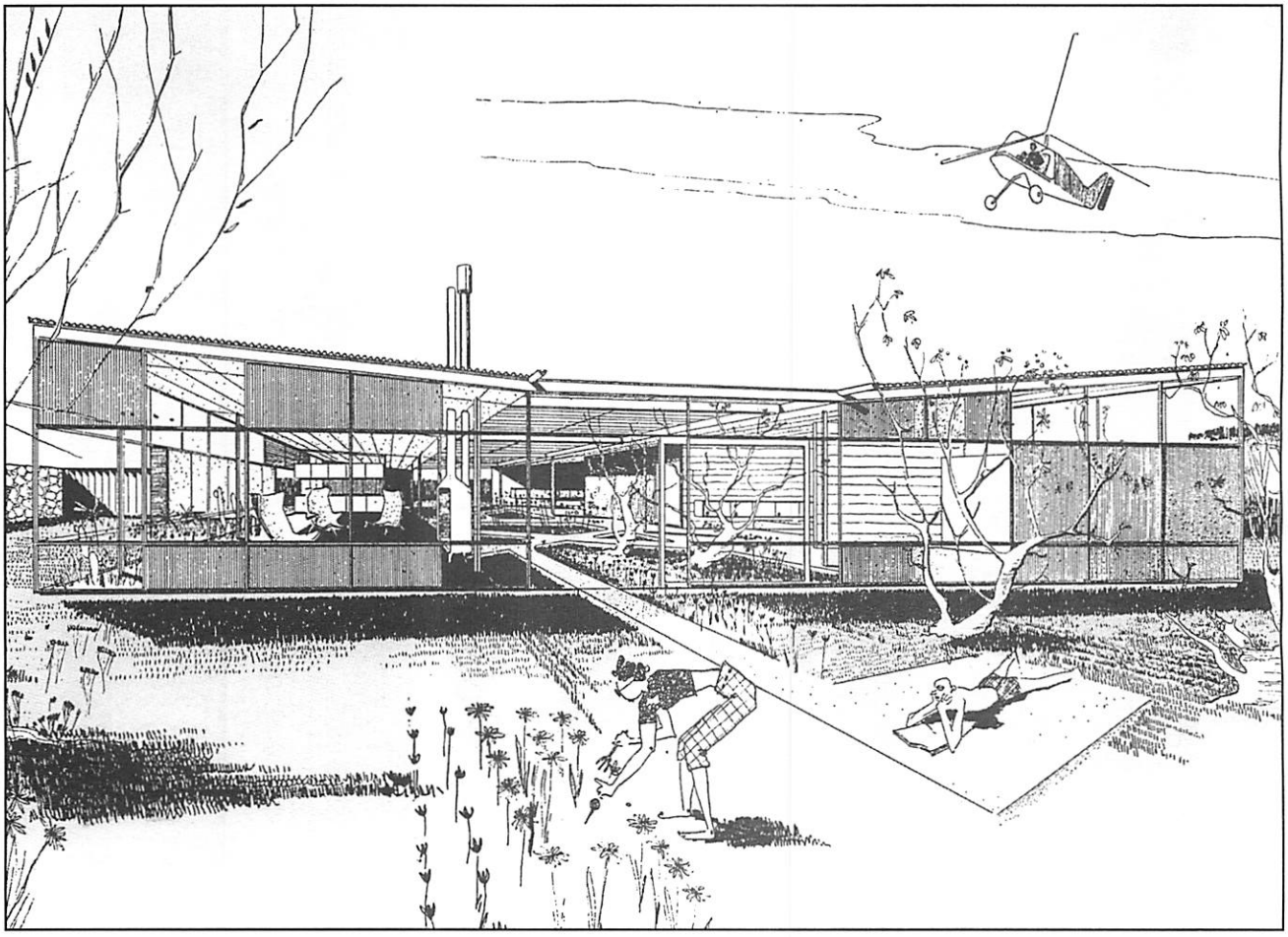
In 1954, Rapson left MIT to become head of the School of Architecture and Landscape Architecture at the University of Minnesota. During his thirty-year tenure there, he led the school to a position of national prominence known for its well-trained, highly skilled graduates. Between 1950 and 1990, an astonishing twenty-seven of forty winners of the prestigious Rotch Traveling Fellowship were Rapson students. In 1987, Rapson received the ACSA/AIA Topaz Medallion, Award for Excellence in Architectural Education.

In addition to his academic responsibilities, Rapson maintained a thriving architectural practice in Minneapolis. In 1963, Rapson collaborated with legendary theater director, Sir Tyrone Guthrie to create the Guthrie Theater, perhaps his most well-known project. The collaboration, which was volatile, combative, and creative, resulted in a dramatic new model for the American regional theater. Rapson created a space in which the barriers between actors and audience, orchestra and balcony dissolved. Rapson's solution was an asymmetrical theater house in which the seats arc 200 degrees around the thrust stage and no seat is more than forty-five feet from the stage. His design acumen and sense of theater informed the outside of the building as well. The original facade—layered, transparent, illusionistic—according to Rapson "anticipated the delight, fantasy and stimulation of the theater experience itself." Unfortunately, the Guthrie's facade was substantially altered in recent years, and no longer reflects Rapson's intentions. Even more unfortunate, it is a strong possibility that the Guthrie Theater building itself, which in 1993 won an AIA Minnesota 25-year Award (one of seven Rapson buildings to be so honored), will face demolition in the near future.

After the Guthrie, Rapson went on to design several other award-winning theater projects including the Performing Arts Center, University of California, Santa Cruz (1971), the Rarig Center for the Performing Arts, University of Minnesota, Twin Cities Campus (1972), and the Humanities and Fine Arts Building, University of Minnesota, Morris (1973).

Rapson has devoted much of his career to the exploration of a wide range of housing issues and has provided a broad spectrum of solutions. Beginning in the mid-1950s in the University Grove neighborhood of St. Paul, he designed a series of small, modern houses, as remarkable for their variety as for their compact sites and fixed budgets. For his own vacation home in Amery, Wisconsin, Rapson created the Glass Cube (1974), a three-dimensional Mondrian-like composition of glass and steel that was constructed entirely of off-the-shelf, standardized materials. Quality, high-density, urban housing for an economically, socially, and culturally diverse population was the challenge at Cedar-Riverside (1962-1973), the first federally funded New Town-In Town in the United States.

At the same time he was working on the Guthrie Theater, Rapson designed a 12,000 square foot house

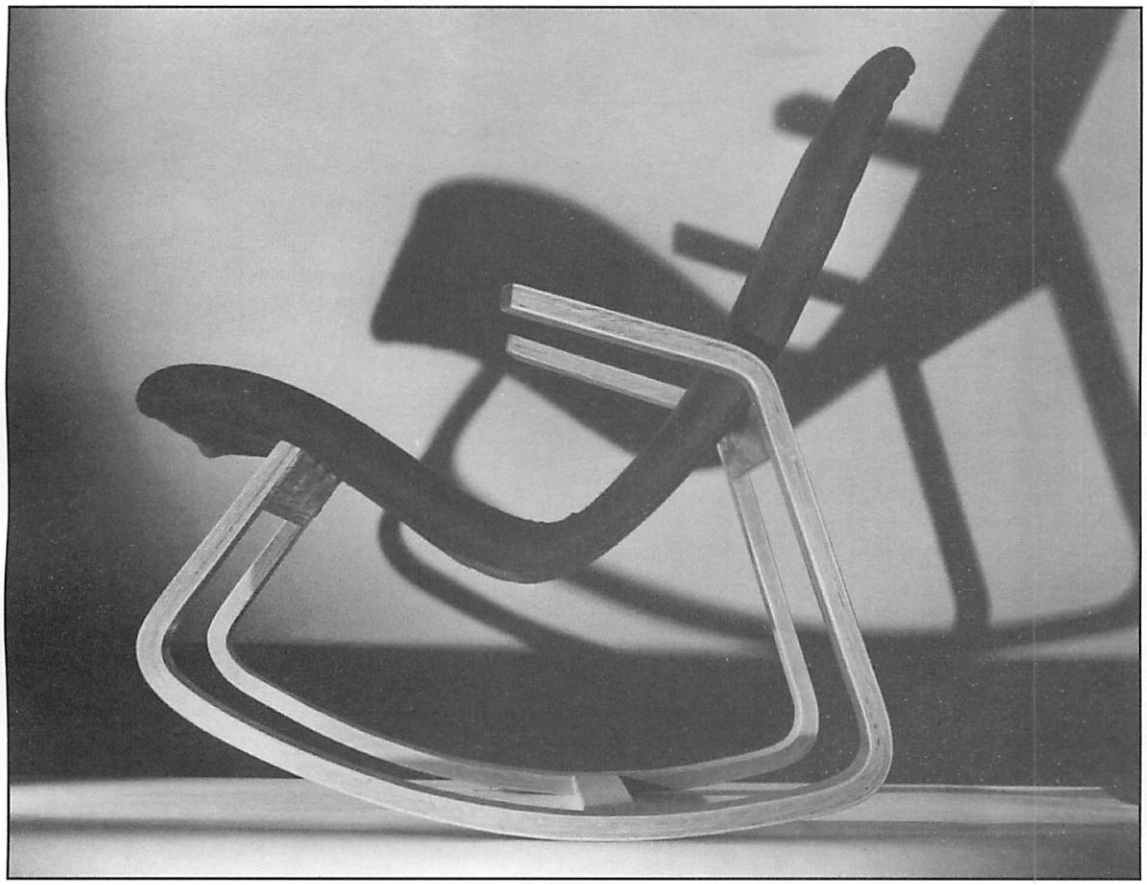


Case Study House #4, "The Greenbelt House," 1945.

for the president of the Pillsbury Company, Philip Pillsbury, and his wife, Eleanor, on a magnificent parcel of family land on Lake Minnetonka, in Wayzata, Minnesota. To address a program that required both social entertaining space, accommodation for an extensive art collection, and private family quarters, Rapson generated a plan of linked pavilions for the Pillsbury House (1963). Rapson linked the light-infused, highly sculptural pavilions together with a series of glass hallways. In 1997, the Pillsbury House, also an AIA Minnesota 25-year Award recipient, was sold and demolished.

Beyond his accomplishments as an architect, Rapson is a consummate artist renowned for his delineation skills. It is clear from his sketches that he loves to draw. Rapson's drawings are characterized by quick, confident lines and highlighted with primary colors, including a favored yellow sky. Another hallmark of a Rapson drawing is his penchant for populating his drawings with whimsical people, whom he develops well beyond the token scale figure. Rapson's people have personalities. They are young and old, fashionable and stuffy, formally dressed and scantily clad. These people are important because their presence reminds us that Rapson's architecture is first and foremost about the people who inhabit it.

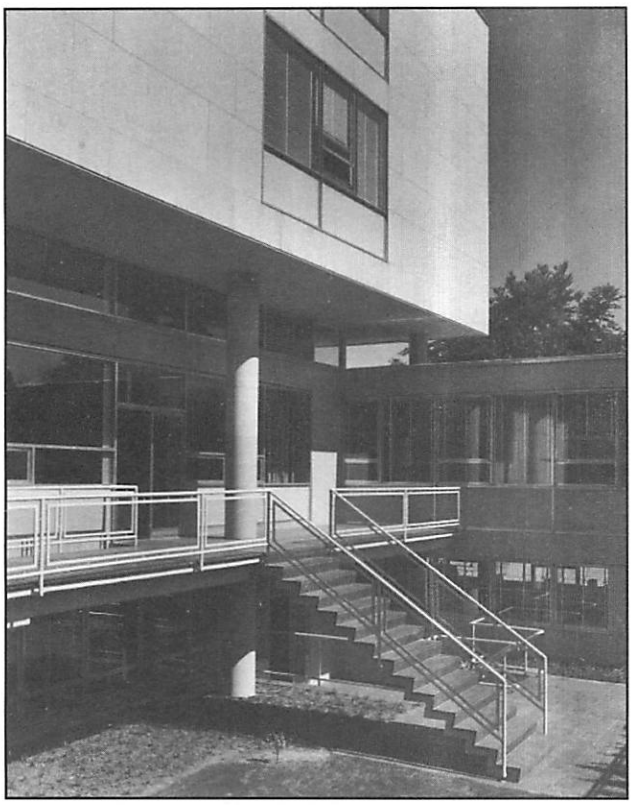
Rapson, at 86, continues to work full time as an architect. His recent projects include designs for the South Korean Embassy in Moscow (1998) and the Jang-Baek Mountain Resort in the People's Republic of China (1998). Last year Rapson was the subject of a book, published by Afton Historical Society Press, and a joint retrospective exhibition at the Minneapolis Institute of Arts and the Frederick R. Weisman Art Museum at the University of Minnesota both entitled *Ralph Rapson: Sixty Years of Modern Design*. The exhibition traveled to The Octagon, in Washington, D.C., in the spring of 2000.



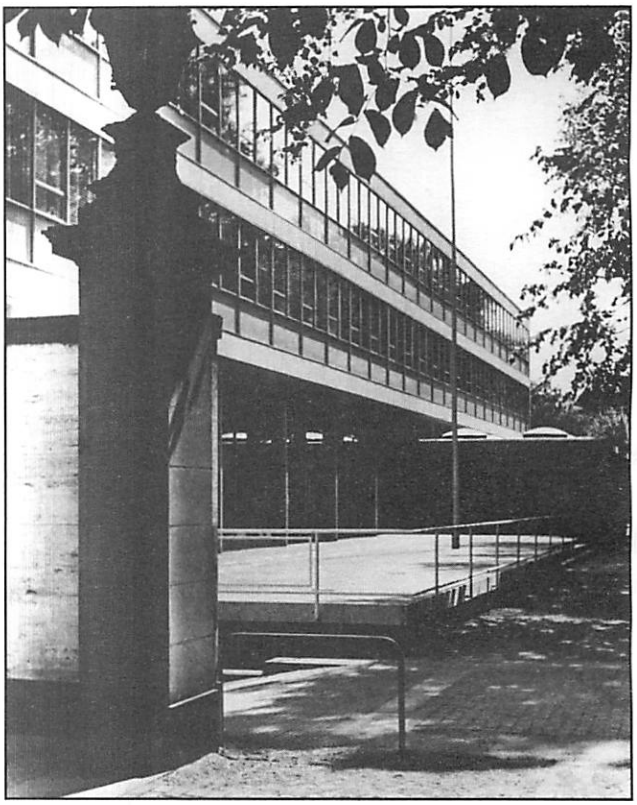
Rapson Rapid Rocker, bentwood frame and uphostered seat (foam and bent plywood), 1951.



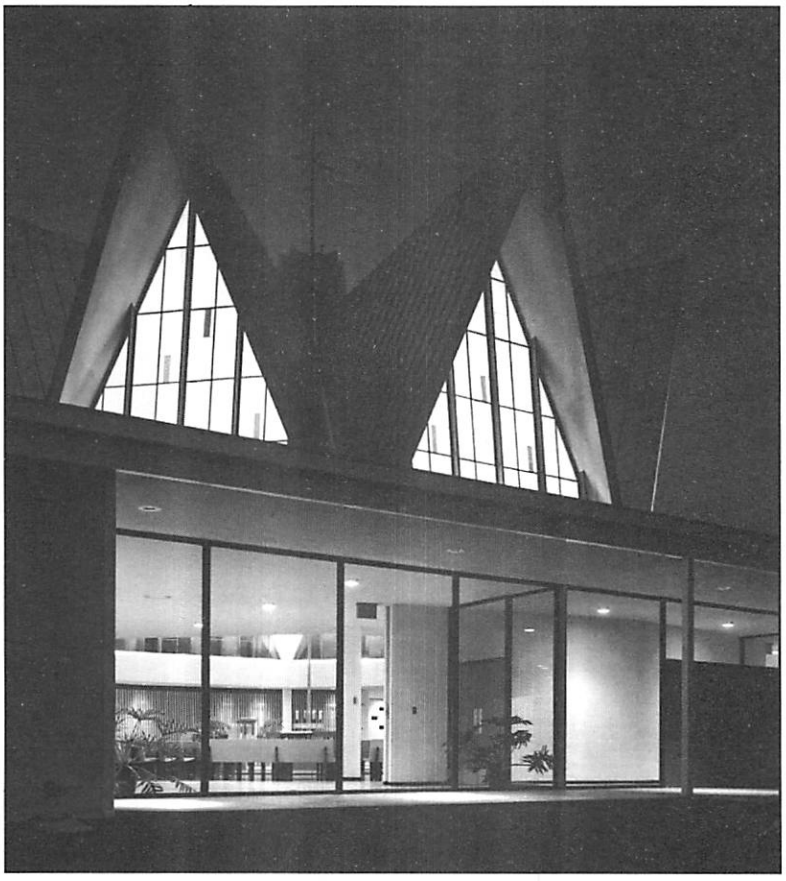
The United States Embassy Office Building, Stockholm, Sweden, 1954.



The United States Embassy Office Building, Stockholm, Sweden, Exterior court, 1954.



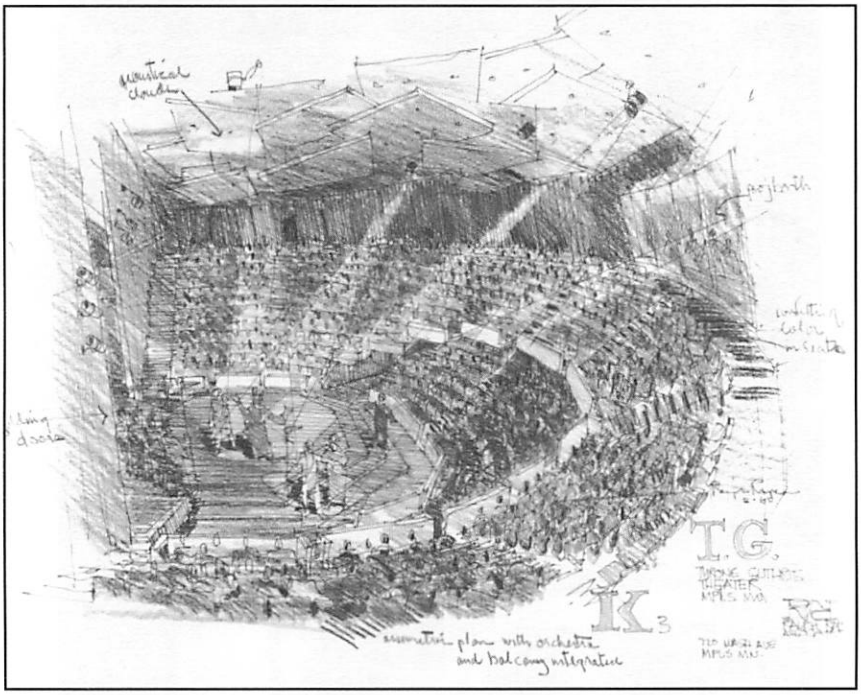
The United States Embassy Office Building, Copenhagen, Denmark, 1954.



St. Peter's Lutheran Church, Edina, Minnesota, 1963.



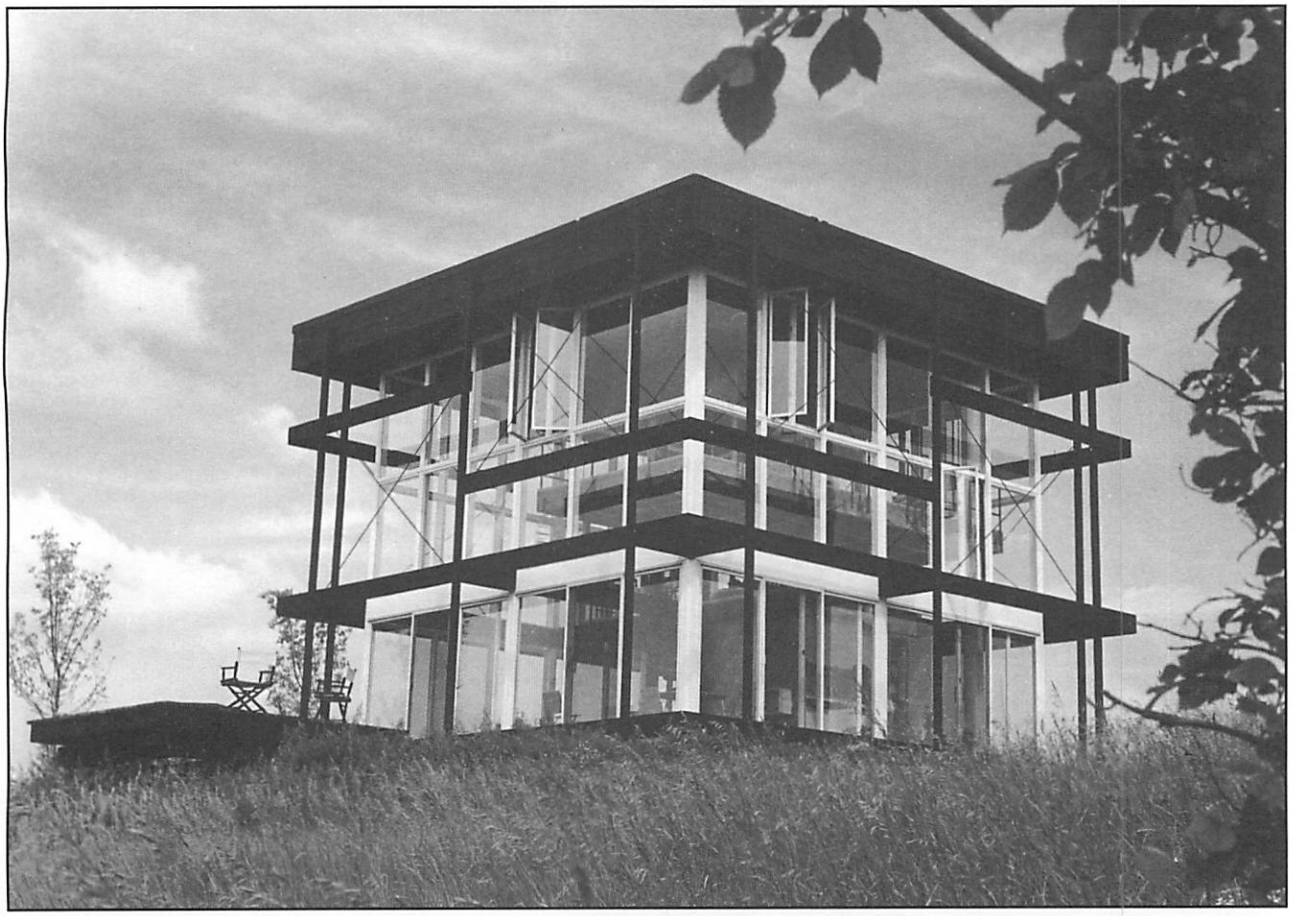
The Tyrone Guthrie Theater, Minneapolis, Minnesota, 1963.



The Tyrone Guthrie Theater, drawing, interior perspective, 1963.



The Pillsbury House, Wayzata, Minnesota, 1963.



The Pillsbury House, Wayzata, Minnesota, 1963.



Thoughts on Preserving the Recent Past

Robert Venturi
Architect
Venturi, Scott Brown and Associates, Inc.
Philadelphia, Pennsylvania

Let us remember an important phenomenon: within the inevitable cycles of taste, we tend to abhor the architecture of the recent past and admire that of the distant past.

I call this the grandmother principle: you hate your mother's wedding gown in your parents' wedding photograph and you love your grandmother's wedding gown in your grandparents' wedding photograph.

When I was young, Victorian architecture was being demolished all over the place, including in Philadelphia: Furness buildings galore and nineteenth century industrial and commercial buildings were cleared to make way for the deadly axis called Independence Mall—now being "revitalized"—although the implication it ever was vital is, of course, specious. So be tolerant of the architecture of the recent past.

And here is another principle to remember: vernacular architecture can be as significant as great architecture in its aesthetic, as well as its historical, technical, and contextual dimensions. And American snobbery concerning its commercial and its industrial architecture is disgusting—an excuse for the vacuous axial context that now demeans Independence Hall was that the axis replaced underwear factories! All the world admires the vitality and validity of our iconographic roadside architecture—except snooty Americans in the land of the free. Someday architects will derive inspiration from the American commercial vernacular as they derived inspiration from the American industrial vernacular in the early twentieth century—and someday billboards, as art as well as advertising, will grace the walls of craft museums, hanging next to hand-quilted bedspreads.

And here's another principle: form does not follow function in architecture—form accommodates function—or functions—so that the preservation of old buildings can be justified for practical as well as historical reasons, and with some inevitable adjustments, the juxtaposition of the old and the new can make for practicality and vitality. Remember, the generic loft factory on Route 95 can accommodate new uses the way the generic loft as palazzo in Florence could traditionally become a library or museum or consulate. Down with preservationalist purism!

And here is a last principle: be sensitive and tolerant concerning the architecture of the past, but don't be fanatical about its preservation. Acknowledge and accommodate the valid dynamic of evolution within urban and institutional contexts that sometimes require demolition of the particular for the sake of the whole. Remember, almost any Renaissance palazzo we admire didn't replace a parking lot within the walls of an Italian city, but almost inevitably replaced a Gothic building we also would have loved.

Viva tolerant preservation but à bas fanatical preservation!

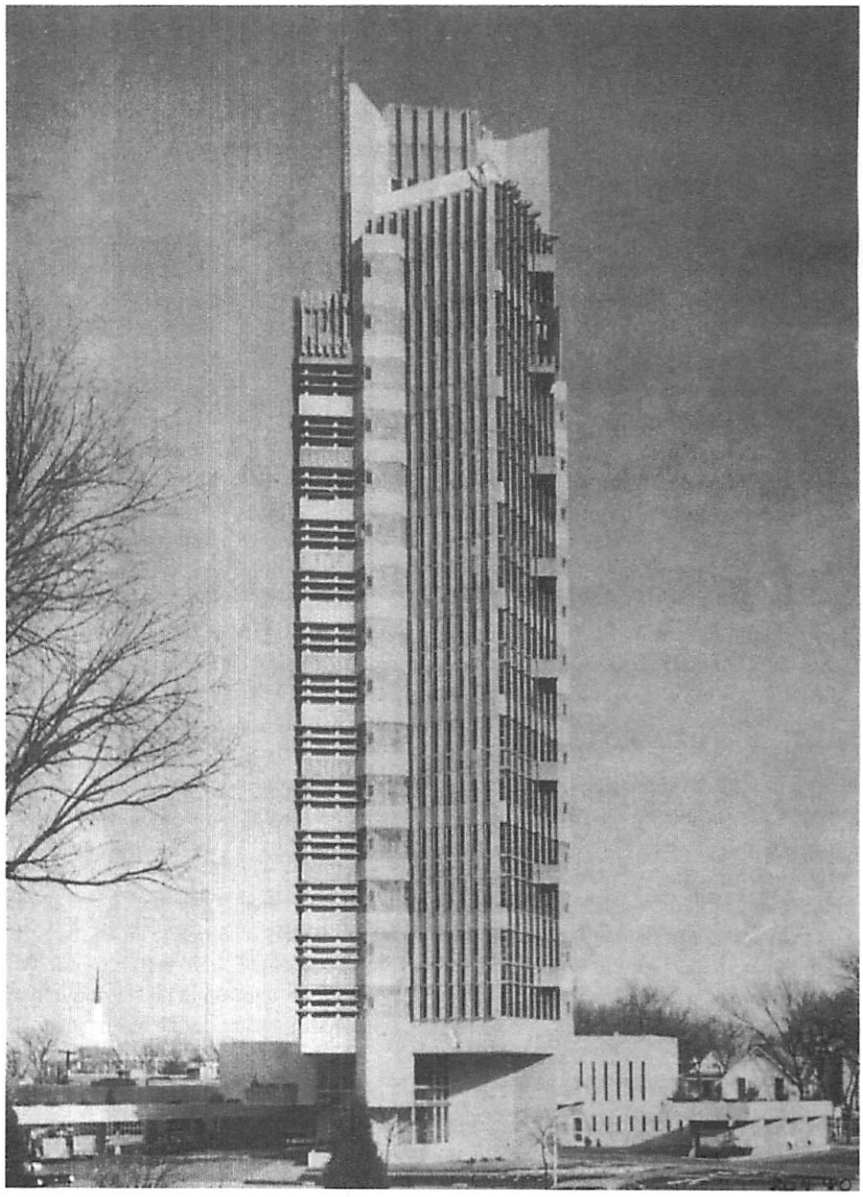
To Save History by Design

JSAH, Journal of the Society of Architectural Historians 58, no. 1 (March 1999).
Reprinted courtesy of the Society of Architectural Historians..

The Fall 1998 SAH Domestic Study Tour to buildings by Bruce Goff and Frank Lloyd Wright in Oklahoma provided a welcome opportunity to see some of America's most original mid-twentieth-century buildings. Coming just twenty-five years after I first visited them while undertaking research for my doctoral dissertation, the tour also raised the question of what will survive of these buildings in another twenty-five years: Will they exist at all, and if so, in what state? Will they continue to function as working buildings, yet with little, if any, vestige of what once made them historically significant? I am grateful to the Editor of the *JSAH* for the invitation to comment on these issues.

Four buildings were to form the core of the tour: the Price, Bavinger, and Ledbetter-Taylor houses by Goff, arguably his greatest built works, and the Price Tower by Wright, his one triumphant realization of what an ideal skyscraper for work and living might be. Yet while planning was under way, the Price house was destroyed by fire, probably the result of arson. The house had been given by its original client to the University of Oklahoma for use as a study center; unable to sustain this use, the university had sold it to a developer with the expectation that the house would be saved and only its surrounding land developed.

The remaining three buildings of this projected core were visited, but under sobering circumstances. Eugene Bavinger died a few months before the tour, and his elder son, preparing to assume from his mother the responsibility of caring for the house, was killed in an automobile accident, leaving the fate of the house more than ordinarily uncertain. Similarly uncertain are the futures of the Ledbetter-Taylor house and the Price Tower, for neither is fully occupied. Ironically, the idiosyncratic elements that distinguish these three surviving structures also complicate their adaptation to other uses. Of the twenty-three other buildings we visited, nearly half either stood empty or had been badly compromised by unsympathetic alterations, and probably few will survive much longer in anything close to their original built form.



Price Tower, Bartlesville, Oklahoma, Frank Lloyd Wright, 1952–1956. Photograph courtesy of The Art Institute of Chicago

What should be done? Under ideal circumstances, all would somehow be preserved in some recognizable state. Yet given the increasingly vast numbers of buildings deemed appropriate for preservation—an understandable response to demands for

cultural pluralism—this seems unlikely. As J. B. Jackson noted several years ago, "We have become a nation of history buffs, so enamored of historical preservation that we do not know where to stop: the Appalachian log cabin, the railroad station, the Art Deco bank all seem equally deserving of the most conscientious restoring."[1] Clearly, priorities must be determined, but this preservationists are reluctant to undertake, fearful that assigning lower ratings to some buildings would encourage hasty demolition.

Perhaps I am wrong to call for such priorities, but the need seems clear enough in a situation such as that which we so recently encountered. Of the twenty-six buildings visited, for reasons I believe can be soundly argued, at least two could readily be nominated as special monuments deserving a museological approach: the Bavinger house and the Price Tower. Both, then, would be taken out of ordinary circulation and elevated to a special status, celebrating that unique fusion of understanding client and inspired architect essential to the realization of any great design. Encouragingly, efforts are under way to achieve this with the Price Tower, although major questions remain regarding methodology and financial support. For as is well known, this is a costly, demanding process, one necessarily limited to only the most exceptional examples. For the remaining buildings, I would actively seek sympathetic users (or encourage sympathetic users already in place to remain). Here preservationists are well prepared to identify appropriate occupants and conceive various strategies for implementation.

Implicit in this second strategy is the need for such buildings to change, to be appropriately reconfigured for ongoing use without sacrifice of historic presence. In this I draw support from the words of David Lowenthal: "It is far better to realize the past has always been altered than to pretend it has always been the same."[2] It is a matter of design *and* preservation rather than preservation alone, and it requires the acceptance of a preexisting building as a work of art deserving respect. Goff's own redesign of the Pollock-Warriner house shows how brilliantly this can succeed. Yet a growing dichotomy between preservationists, who too readily seek to prevent change, and architects, who too eagerly seek to accelerate it, impedes this course of action. Part of the problem, I think, lies in the training of both.

Those studying preservation necessarily select from a wide range of subjects, diverging from the broadest aspects of regional planning to the most finite problems of material conservation. Yet there is an alarming tendency toward overspecialization within this spectrum, most evidenced by enthusiastic technicians who, from within the protective sanctuaries of their laboratories, tend to regard buildings as immutable artifacts, like archaeological relics or masterworks of ancient sculpture. There is little, if any, instruction in how to effect creative, yet still appropriate, modification of historically significant buildings—that is left to the architects, whose curriculum is separately conceived.

For those studying architecture, there seems to be little awareness that historic fabric can provide a stimulating point of departure for design, and little acknowledgment that preexisting structures are increasingly a feature of sites on which new structures must be interwoven. One required semester-long studio dealing with theoretical issues of building modification—teaching how to adapt and add to significant, yet not necessarily monumental, architectural fabric—could accomplish much in the solution of this problem. Yet I have tried for fifteen years to institute such a studio in my school without noticeable result.

Students themselves seem a bit more inclined to address this problem than their design faculty, as reflected by the topics that a few brave souls choose each year for their individual design theses. Yet their efforts are too often dismissed by that same design faculty as undeserving of attention, as mere exercises in mundane preservation rather than serious design investigations. Other aspects of architectural education can further complicate the situation. For example, when history is repackaged as theory, it can lead to a fragmented, highly subjective interpretation of the past, leaving students ill prepared to judge the historic contexts, or to sustain the animating principles, of buildings they may later be called upon to modify. Such courses might more effectively incorporate design theory related to preservation, but to date such a theory has not been clearly articulated, partly, I think, because preservationists are reluctant to engage in that necessary dialogue with architects to define methods of engaging and sustaining history through contemporary design. When I view attempts of recent graduates to deal with modifications to existing buildings, I wish they had a better grasp of such theory, and that their first exercises had been confined to a design studio rather than forced upon an actual building.

My personal views on these matters derive primarily from observations made at my own school, but based upon visits to other schools, I suspect the situation I outline so roughly is rather widespread. It would hardly matter if there were nothing to preserve but a few major monuments that could conveniently be frozen in time. But this situation is otherwise, and unless we begin to integrate design more effectively with historic preservation, requiring both a better sense of preservation by architects and a better sense of design by preservationists, much of importance will be lost, or at the very least senselessly disfigured.

—DAVID G. DE LONG
University of Pennsylvania

Notes

[1] John Brinckerhoff Jackson, *Discovering the Vernacular Landscape* (New Haven, 1984), x.

[2] David Lowenthal, *The Past Is a Foreign Country* (New York, 1985), 412.

Conserving the Built Heritage of the Modern Era: Recent Developments and Ongoing Challenges

SUSAN D. BRONSON and THOMAS C. JESTER

While the last decade has witnessed considerable progress in the conservation of the resources of the recent past, the resolution of ongoing philosophical and technical questions associated with this challenge will depend on continued collaboration and dialogue.

Introduction

Although the conservation community has attained a level of competence over the last thirty years in the development of philosophically and technically appropriate solutions for conserving earlier built heritage, it has yet to come to terms with some of the challenges presented by the resources of the recent past (defined for the purposes of this article as the buildings, districts, and sites of the Modern era, or the period between about 1930 — 1920 in some countries — and the mid-1970s).

North America is rich in resources of the Modern era but what should be safeguarded, and how, is far from obvious. A significant portion of the population — including some heritage professionals and policymakers, as well as the general public — is not yet convinced that this heritage is worthy of protection. Furthermore, many government agencies, with downsized staff and diminished budgets, are struggling to protect earlier heritage and have been unable to develop programs focusing on more recent resources. Finally, many of the resources of the Modern era were designed for a shorter lifespan than their earlier counterparts, and their conservation raises complex philosophical and technical questions of authenticity and sustainability.

This article provides an update on recent developments in the conservation of the resources of the Modern era at the international level and at the local and national levels in the United States and Canada. Part one presents an overview of international and regional meetings held during the last decade. Part two provides an update on six interrelated aspects of current heritage programs at the international, national, and local levels: identification, inventory, listing, protection, research, and awareness. Part three introduces two conservation themes — authenticity and sustainability — that present particular challenges.



Fig. 1. The River Park housing complex (1962) in Washington, D.C., was developed by the Reynolds Aluminum Service Corporation to promote the use of aluminum building products in urban development. Its nomination as a historic district has been considered by some residents. Photograph © Franz Jantzen, 1988.

International and Regional Meetings

Various international and regional meetings over the last decade have served as forums for exchange among those working at the local and national levels in different countries, those involved at the international level, and membership organizations made up of academics, professionals, researchers, and others interested in the resources of the Modern era.

The 1989 Council of Europe colloquium in Vienna[1] led to a follow-up

meeting in Barcelona in 1990 and the adoption in 1991 of "Principles for the Conservation and Enhancement of the Architectural Heritage of the Twentieth Century."[2] These address the identification, protection, management, conservation, and awareness of recent resources and remain relevant both within and outside Europe. In June 1995 these "Principles" provided the point of departure for an international "Seminar on 20th-Century Heritage" in Helsinki. Organized by the Finnish National Committee of ICOMOS (International Council on Monuments and Sites), this meeting allowed exchange among experts from 13 countries and concluded with 11 general recommendations and two recommendations dealing specifically with World Heritage.[3] A year later Latin American members of ICOMOS organized a follow-up seminar in Mexico City; this addressed concerns associated with twentieth-century heritage in the Americas, in particular Latin America.[4]

While the focus of these meetings was mainly on the philosophical challenges of defining and protecting the built heritage of the recent past, regional events in the U.S. and Britain examined both principles and practice. In 1995 about eight hundred policymakers, practitioners, researchers, scholars, and tradespeople convened in Chicago for the "Preserving the Recent Past" conference, hosted by the U.S. National Park Service. This seminal meeting examined a wide range of resources and featured new research on the challenges of evaluation, preservation and re-use strategies, and the conservation of materials, as well as a workshop on curtain walls.[5] Later in 1995 English Heritage's "Modern Matters" conference in London addressed the philosophical, methodological, and technical challenges of conserving Britain's postwar architecture and sought to determine directions for future efforts.[6] Despite their regional focuses, the proceedings of both events are relevant to other countries.

Another important development was the establishment in 1988 of DOCOMOMO (International Working Party for the Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement), a membership organization with working parties in about 35 countries. Since 1990 DOCOMOMO's biannual conferences have provided opportunities for exchange on the history, documentation, and conservation of the heritage of the Modern Movement. In addition, the organization's international specialist committees on technology (ISC/T), registers (ISC/R), landscape (ISC/L), urbanism (ISC/U), and education (ISC/E) work on special projects and seminars. DOCOMOMO publishes a semiannual journal and proceedings for its conferences and seminars.[7]

Other membership organizations devoted to the conservation and history of the built environment have also addressed the heritage of the Modern era. In North America, APT International has dealt with conservation issues in its publications, annual conferences, and training and education activities since 1987.[8] The Society of Architectural Historians (SAH) and the Society for the Study of Architecture in Canada (SSAC), among others, foster increased understanding of the history of these resources.

While they did not provide solutions to all of the philosophical and technical issues confronted in the conservation of resources of the recent past, these meetings laid the groundwork for coordinated efforts among those working on this topic at the local, national, regional, and international levels.

Current Heritage Programs

Programs aimed at conserving the built heritage of the recent past, like those for conserving earlier heritage, include a number of interrelated processes that complement, and in many cases precede, physical interventions. These include identification (or definition), inventory (or framework for analysis), listing (or commemoration, classification, designation, registration, depending on the jurisdiction), protection, research, and awareness. While most local and national governments address some or all of these aspects of conserving earlier heritage, many are still developing strategies for the heritage of the recent past. Approaches vary considerably from country to country and at the local level within the same country.

Identification. How should the built heritage of the recent past be defined in terms of the scope of resources it encompasses and the period it covers?

Most of those involved in the conservation of resources of the recent past acknowledge the broadened definition of cultural heritage that has been increasingly applied over the last decade. While few question that the well-known landmarks of the Modern era are worthy of attention, there is also growing interest in non-monumental resources that in many respects are more revealing of the culture of their day and the preoccupations of those who designed, built, and used them. In addition, the scope of the built heritage of the recent past includes new types of resources developed in response to changing needs and technologies (gas stations, wartime housing, public-housing complexes, shopping centers, motels, parking lots, garages, etc.), as well as earlier types that were redefined during this period (houses, planned communities, schools, university campuses, hospitals, industrial buildings, plazas, etc.).

When discussing the built heritage of the recent past, time parameters are less obvious than scope. Some prefer to consider the production of the entire twentieth century, characterized by increasing globalization and rapid technological advances that since c.1900 have had a major impact on the built environment. Others prefer to focus on a shorter and more manageable time frame, such as the Modern era or the postwar period, which has the advantage of a cutoff that allows historical perspective of at least twenty to 25 years. Ultimately, most jurisdictions define their focus on the recent past according to the needs and lacunae of their existing heritage programs.

Concern about the dearth of twentieth-century resources on the World Heritage List led ICOMOS, which advises the World Heritage Committee on World Cultural Heritage, to commission DOCOMOMO to recommend guidelines for the nomination of resources of the last century;[9] it is expected that these

will be reviewed by the World Heritage Committee in December 1997. Meanwhile, the 1995 Helsinki seminar concluded with two recommendations that addressed the scope and time parameters of World Heritage: "that there be an ongoing process of consultations between ICOMOS, DOCOMOMO and the World Heritage Centre in order to define the twentieth-century heritage and develop a methodology for its identification" and "that it would be advisable only in exceptional cases to propose for inclusion to the World Heritage List properties which are less than 25 years old in order to allow sufficient time for historical perspective and scientific analysis."[10]

DOCOMOMO's own work is concerned with the buildings, sites, and neighborhoods of the Modern Movement, which was originally defined as the important architectural developments in Europe of the 1920s and 1930s. Over the last decade, however, efforts to identify the most significant MoMo resources in about 35 countries reflect the reality that in many regions (including the Americas) it was during the postwar period that the Modern Movement really asserted itself.

In the U.S. the identification of resources of the recent past for listing purposes depends on a sliding timeframe. In 1979 an NPS *Bulletin* was published to clarify how "properties that have achieved significance within the last fifty years" could be eligible for the National Register of Historic Places.[11] As the National Register is "intrinsically a compilation of the Nation's *historic* resources that are worthy of preservation," it is considered that "the passage of time is necessary in order to apply the adjective 'historic' and to ensure adequate perspective." It is acknowledged, however, that "fifty years is obviously not the only length of time that defines 'historic' or makes an informed, dispassionate judgment possible. It was chosen as a reasonable, perhaps popularly understood span that makes professional evaluation of historical value feasible."[12] At the local level, the definition of the built heritage of the recent past varies from state to state and municipality to municipality; in New York City, properties only thirty years old can be nominated as landmarks.

In Canada most buildings must be forty years old, and their architect must have been dead for at least five years, before they are considered by the Historic Sites and Monuments Board of Canada (HSMBC), which makes recommendations for national commemoration to the Minister of Canadian Heritage; there are no restrictions, however, on the age of districts or sites.[13] In November 1997, however, the HSMBC will consider a proposal that addresses Canada's "built heritage of the Modern era," defined as the buildings, ensembles and sites dating from about 1930 through the mid-1970s.[14] As is the case in the U.S., Canada's local heritage programs vary in defining the heritage of the recent past: some jurisdictions have no cutoff, some consider all resources more than twenty to 25 years old, and others are not yet addressing postwar resources.[15]

Inventory. What is the best way to document the built heritage of the recent past so that its scope can be better understood and resources worthy of protection can be identified?

The importance of inventories, or frameworks, for the comparative analysis and evaluation of the heritage of the recent past has been identified as a priority at most of the major meetings.[16] The approach to the "heritage inventory," or "cultural-resource site survey," as a conservation tool has developed considerably since the 1970s and 1980s;[17] reduced budgets for such undertakings and new documentation technologies suggest that today's heritage inventories should be flexible, cost-effective tools that respond to the specific objectives of the heritage program in question and can be added to over time and linked with other types of relevant information.[18] At the state/provincial and national levels, frameworks for analysis — that is, more general studies that identify important themes and focus on representative examples of these themes — provide a viable alternative to comprehensive inventories that complement more detailed local initiatives.

There is no comprehensive international inventory or framework for the analysis of the heritage of the recent past. However, since the evaluation of potential World Heritage Sites involves comparative analysis on a global scale, a framework for analysis would obviously be useful. Hopefully DOCOMOMO's proposed guidelines for World Heritage will begin to address this challenge.

DOCOMOMO is also compiling its own international inventory. Over the last five years, each working party has been preparing a National/Regional Register made up of "fiches" (documentation forms) for the ten to twenty resources considered most significant in "technical, social and/or aesthetic innovation." These are reviewed by DOCOMOMO's International Specialist Committee on Registers, which is overseeing the creation of the organization's "International Selection," to be published in a few years.[19] Although it does not aim to be comprehensive, this survey will provide valuable background material on selected MoMo landmarks in several countries.

The U.S. does not possess a comprehensive nationwide inventory or framework for analyzing the resources of the recent past. However, the Park Service has conducted a number of studies on important resource types (such as post offices) and themes in American history (such as "Man in Space" and "World War II"), and these have led to the inventory of particular groups of resources.[20] DOCOMOMO US hopes to complement these efforts through the preparation of a DOCOMOMO National Register of American resources.

At the local level some states have undertaken surveys that provide frameworks for analyzing specific resource types. The Rhode Island Historical Preservation Commission surveys, for example, include resources of the recent past, and the State of Pennsylvania has surveyed all its Depression-era Civilian Conservation Corps camps. Documentation on postwar architecture is being assembled by the Los Angeles Conservancy, and surveys of recent resources in Las Vegas have been undertaken.[21]

In Canada the HSMBC is considering a proposal to establish a nationwide framework for analyzing and evaluating

the built heritage of the Modern era. Inspired by Britain's successful program for postwar architecture,[22] this would involve a series of studies that consider buildings, ensembles, and sites based on broad categories of use (education, religion, housing, etc.). Each study would focus on representative resources that reflect three cultural phenomena that relate directly to proposed preliminary criteria for evaluation: changing social, economic, and political conditions; rapid technological advances; and new ways of expressing form and responding to functional demands.[23]

At the local level a 1997 Parks Canada survey revealed a growing number of municipal inventories of the heritage of the recent past, each slightly different in approach. The city of Vancouver's Recent Landmarks Program, initiated in 1990, has inspired similar inventories in surrounding municipalities, and programs are being carried out in other cities across the country, including North York, Mississauga, and Edmonton. Some municipalities, such as Toronto, integrate recent heritage into their programs for earlier heritage. Many Canadian municipalities, however, are still searching for guidance and/or funding to proceed with inventories of their recent resources. Nongovernmental special-interest groups are also preparing inventories: DOCOMOMO Ontario, DOCOMOMO Québec, and the newly established DOCOMOMO BC have documented selected MoMo resources in their regions, a chapter of the Architectural Institute of British Columbia is preparing an inventory of Victoria's Modern heritage, and students at the University of Calgary have begun documenting Alberta's twentieth-century resources. The Parks Canada survey confirmed that the success of efforts at the national level will depend on collaboration with all those working at the local level.[24]

Listing. To what extent are significant resources of the recent past officially recognized by means of listing, commemoration, designation, classification, or registration (depending on the jurisdiction)? And how are these resources evaluated?



Fig. 2. The 1987 demolition of the first reinforced concrete "arch hangar" in North America, designed in 1928 by architect-engineer Ernest Cormier, increased awareness of the need to protect significant resources of the Modern era. Photograph by Studio Samuel Jack Hayward, after 1928, Ernest Cormier Fonds, Collection Centre Canadien d'Architecture/Canadian Centre for Architecture, Montreal.

Only five of the 506 World Heritage Sites date to the twentieth century (although decisions regarding two additional sites will be made in December 1997).[25] At present, each State Party of the World Heritage Convention nominates potential sites within its own boundaries, and these must comply with at least one of the six criteria, "meet the test of authenticity in design, materials, workmanship or setting," and possess "adequate legal protection and management mechanisms" to ensure their conservation.[26] The relevance of these requirements to twentieth-century heritage will be addressed in DOCOMOMO's upcoming guidelines.

In the U.S. more than 2,100 properties less than fifty years old at the time of nomination are currently listed on the National Register of Historic Places; this represents a mere 3.2% of the total. While most were listed for their architectural significance, other areas — social history, politics/government, commerce, transportation, and engineering — are also represented.[27] For properties less than fifty years old, the citizen nominating the resource must show that it has been the object of scholarly evaluation and demonstrate that sufficient historical perspective and scholarly analysis exist to justify its "exceptional importance" at the national, state, or local level. The nominated resource is then assessed according to the same National Register Criteria for Evaluation that apply to earlier properties.[28] At the local level many municipalities have adopted the well-established National Register process, sometimes adapting it to reflect local considerations, and preservation ordinances are frequently used to list and protect significant resources.

In Canada, buildings, districts and sites can be commemorated at the federal level as National Historic Sites,[29] and in 1995 less than 3% of these dated to 1930 or later. Citizens may submit suggestions for commemoration, and agenda papers on resources of potential national significance are prepared for review by the HSMBC. A series of preliminary criteria for the evaluation of Canada's built heritage of the Modern era is currently being considered.[30] At the local level few resources of the recent past are designated, but the municipalities with inventories of the resources

of this period, such as Vancouver and North York, are the most advanced in terms of listing those of particular significance. In most cases municipal designation implies some form of protection, and in some jurisdictions it conveys eligibility for grants.

Protection. To what extent does the built heritage of the recent past enjoy protection against neglect, insensitive rehabilitation, and demolition?

Given the small number of resources of the recent past that are listed, it is not surprising that very few enjoy legal protection. Indeed, the numerous potentially significant resources already lost suggest that protection depends as much on awareness as on legal measures.

The protection of World Heritage Sites is the responsibility of the State Party in which they are located. A resource can be removed from the World Heritage List if it loses the characteristics that made it eligible for inscription or if the protective measures identified upon its nomination are not undertaken.[31]

Listing in the U.S. National Register is largely honorific, but some protection is afforded when federal funding or licensing is involved. The National Historic Preservation Act requires federal agencies to assess the impact of their activities on listed properties and those that are eligible for listing. Agencies must permit the Advisory Council for Historic Preservation, an independent federal agency that works with the State Historic Preservation Office, to evaluate the proposed federal actions and recommend mitigation measures if necessary. At the local level historic district commissions and architectural review boards protect resources from inappropriate changes.

In Canada the heritage character of National Historic Sites owned by the federal government or subjected to cost-sharing agreements must be respected in the event of any alterations,[32] and it is hoped that the owners of other National Historic Sites would protect their properties from unsuitable interventions. In most cases national commemoration enhances public awareness and reinforces local efforts to ensure long-term protection.[33]

It is possible in both the U.S. and Canada to introduce legal measures at the local level to protect listed resources and in some case even to help fund conservation work; still, it will be some time before the most significant buildings, districts, and sites are safeguarded against insensitive rehabilitation and demolition.

Research. What is the status of research on the history and technology of the resources of the recent past, and how can scholarship in this field help to define significance and develop appropriate conservation strategies?

While much research on the Modern era remains to be done, the increasing number of studies on the cultural phenomena that influenced the design of this period — not just new preoccupations about form and function but also the rapid technological advances and changing social, economic, and political conditions — has facilitated the identification of the values of this heritage and the development of appropriate strategies for its conservation.

When compared with works of the 1970s and 1980s, recent writings on the cultural history of the built heritage of the Modern era tend to consider a wider range of resources (the vernacular, as well as landmarks) and to pay more attention to resources that combined local traditions with new ideals, as well as those that exemplified mainstream ideologies. International studies have begun to consider the production and design throughout the world, as opposed to focusing solely on Europe and the U.S., and regional and national accounts are now investigating the work in smaller centers, as well as major cities. In addition, the art-historical approach that emphasized aesthetics (or style) is being superceded by one that considers cultural factors, technology, and function, in addition to form. The value of a multidisciplinary approach is increasingly acknowledged, and scholarship underway in related sub-fields of history, the social sciences, and other disciplines is enriching the understanding of resources of this period.[34]

Available sources for researching the resources of the Modern era are more varied than those used for the study of earlier heritage. It is often possible, for example, to interview those who designed, built, and used these resources. In addition to consulting primary sources that also exist for earlier heritage — drawings, photographs, journals, building catalogues, popular magazines, etc. — more recent sources — such as taped interviews, movies, and radio and television broadcasts — can add another dimension. Although a large amount of material related to the built heritage of the Modern era has already been lost, increasing awareness of its significance has led the growing interest in collecting such material.[35]

This work on the cultural history of the Modern era is complemented by new research into the history of technology. Scientific research on Modern materials and assemblies is being carried out by government agencies, such as the National Research Council (NRC) in Canada and the National Institute of Standards and Technology (NIST) in the U.S., and graduate programs, such as the Architectural Conservation Lab at the University of Pennsylvania and the Center for Preservation Research at Columbia University. At the international level DOCOMOMO's ISC/T is compiling a worldwide database of research on the technical issues of conserving MoMo resources; a first edition of this ongoing work, published in 1996, confirms the wide range of topics being explored throughout the world.[36] The U.S. Park Service has sponsored research on a variety of topics; one major research project culminated in the publication in 1995 of *Twentieth-Century Building Materials: History and Conservation*.[37] Finally, increasing opportunities for presenting and publishing practical case studies that apply the history of technology to the philosophical and technical challenges of conserving resources of the recent past help to disseminate knowledge in this field.[38]

Awareness. What is the status of efforts to increase awareness — of not only the general public, but also professionals, scholars, researchers, and policymakers working in the heritage field — and how can such initiatives help to protect the

built heritage of the recent past?

It is generally agreed that there is a need to share information at all levels and that new communication technologies (Internet, CD-ROM, videos, etc.) should be combined with more traditional but equally valid methods of fostering this type of exchange (conferences, exhibitions, publications, guided tours, etc.).[39]

A series of upcoming international and regional events will allow opportunities for continued debate among professionals and researchers, and the organizations involved are making an effort to collaborate and coordinate their activities and publications.

DOCOMOMO is planning its 1998 conference in Stockholm, and the World Heritage site of Brasilia will be the venue of its meeting in 2000. A second "Preserving the Recent Past" conference is being considered by the National Park Service. APT International continues to seek presentations and articles on the conservation of resources of the Modern era and is planning conference sessions focusing on authenticity and sustainability within the next few years.

In addition to such activities aimed at professionals, policymakers, researchers and academics, initiatives involving the public in general are worthy of note. Some of the earliest and most successful awareness efforts were inspired by inappropriate rehabilitation projects or demolitions that became the object of media attention through advocacy efforts. For example, the 1987 demolition of the first reinforced concrete "arch hangar" in North America without either a permit or a study of alternatives for the building's future led to a "lemon" award from Save Montreal that increased the awareness of professionals, decisionmakers and the public.[40] The attempt of Denver's Modern Architecture Preservation League (MAPL) to convince the city to designate I.M. Pei's Zeckendorf Plaza, although ultimately unsuccessful, involved citizens in a debate about the recent past.[41]

Other awareness initiatives at the local level are being carried out by regional working parties of DOCOMOMO. DOCOMOMO Québec organizes visits to MoMo buildings, districts and sites, and slide presentations of MoMo heritage in different parts of the world. DOCOMOMO Ontario has given tours of and prepared a video on Toronto's Modern heritage. The newly established DOCOMOMO BC is preparing activities related to an upcoming exhibition on Modern architecture in Vancouver. In the U.S. DOCOMOMO's New York/Northeast Chapter organizes lectures and tours, and other chapters in the Midwest, northern California, and the Southeast are developing programs of activities.

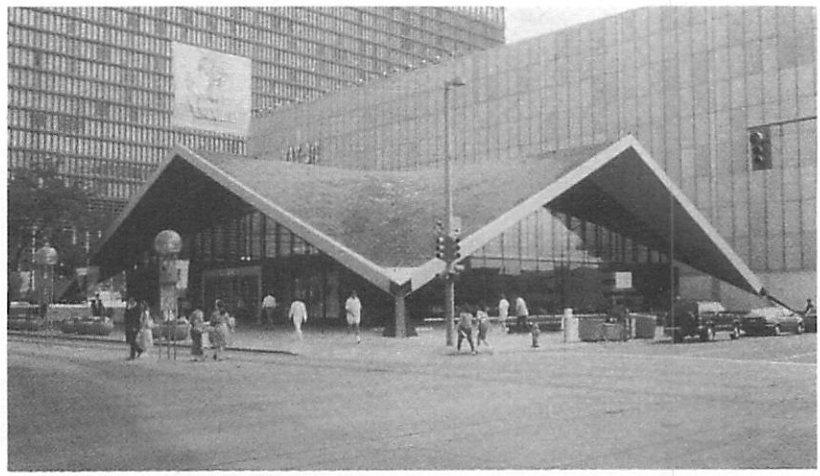


Fig. 3. Zeckendorf Plaza (1956-60), an urban scheme designed by I.M. Pei, was denied landmark status by the Denver City Council. The recent demolition of part of it and the insensitive remodeling of its store block raised public awareness about the resources of the Modern era. Photograph courtesy of Diane Wray, MAPL.

Exhibitions and publications also enhance awareness. The Canadian Centre for Architecture's 1997 book and exhibition entitled *The New Spirit: Modern Architecture in Vancouver, 1938-1963*, for example, increases appreciation of the production and design of the Modern era not only in Vancouver but also in other North American cities.[42] Similarly, the National Building Museum's 1994-95 exhibition entitled "World War II and the American Dream: How Wartime Building Changed a Nation" and the accompanying book illuminated postwar housing and other building programs of the period.[43]

Collaborative initiatives involving governments, advocacy groups, educational institutions, and individuals have been particularly effective. A student research project at the School of Architecture of the University of Waterloo in Ontario, for example, evolved into an exhibition and publication that was organized in collaboration with the Kitchener/Waterloo Art Gallery.[44] Students carried out archival research on local buildings, documented them, and in many cases interviewed their designers, builders, original owners, or users. At the same time, local residents, municipal authorities, and professionals came to better appreciate the buildings and sites that had always been taken for granted. This exercise serves as a model for other communities.[45]

The year 2000 will no doubt witness special events and publications dedicated to twentieth-century heritage. It has already been suggested, for example, that Heritage Day be dedicated to celebrating twentieth-century heritage throughout the world.[46]

Ongoing Challenges

While considerable progress has been made in the development of heritage programs aimed at conserving resources of the recent past, numerous philosophical and technical questions that must be addressed when physical interventions are required remain unresolved. The challenges presented by authenticity and

sustainability, for example, merit further exploration.

Authenticity. Although the concept of authenticity — or integrity — can be traced as far back as the practice of conservation, it has received considerable attention at the international and regional levels during only the last five years.[47] While it is generally agreed that sound conservation practice implies assessing and respecting integrity,[48] it is not always clear how and to what degree this should be done when dealing with resources of the recent past.

Defined as "the ability of a property to convey its significance,"[49] integrity is recognized in North America as one of the factors that can be used not only to identify and assess the values of a heritage resource but also to develop a strategy for its conservation.[50] It can be considered in terms of form and design, materials and substance, use and function, traditions and techniques, location and setting, spirit and feeling, and other internal and external factors.[51] A resource does not necessarily lack integrity if it no longer corresponds to its original configuration and condition in terms of all of these qualities; rather, its heritage character can be assessed, and a respectful conservation strategy determined, by considering its overall integrity, which encompasses all or some of these qualities.[52]

Authenticity raises questions that require further clarification, especially with regards use and function, material and substance, and form and design. In many cases, new technologies and changing social, economic, and political conditions have led to the adaptation of resources of the Modern era, many of which have outlived their original purpose, to accommodate new uses or new ways of meeting updated requirements of their original function. During this period of rapid technological advances, many materials, fittings, assemblies — as well as entire buildings, districts, or sites — were designed to be replaced after a limited lifespan. Furthermore, new ways of living and working, not to mention the constant pressure to keep up with trends during an age that promoted change as progress, have resulted in frequent adaptation of design features.



Fig. 4. The B.C. Electric building in Vancouver (1955-57), lauded at the time of its construction for its innovative structure and plan, was the first post-1940s heritage site to be designated by the city of Vancouver. Its recent renovation, which involved replacing its curtain wall and converting its office spaces to residential use, addressed challenging questions of authenticity and sustainability. Photograph by Susan D. Bronson, 1997.

While the recent international and regional meetings did not emphasize the application of authenticity to the built heritage of the Modern era,[53] they stressed the need to adopt a flexible interpretation of the concept that can be applied on a case-by-case basis with a full understanding of the socio-economic, ecological, cultural, and historical contexts of the resource in question.[54] The application of such an open-minded, resource-specific approach to practical problems involving resources of the recent past merits further exploration, and the discussion of practical case studies would help to advance this theme.

Sustainability. The theme of sustainability — sometimes referred to as sustainable development or sustainable design — has been the object of increased attention since the mid-1980s when the World Commission on Environment and Development sent out warnings about "our common future."[55] While it is now generally acknowledged that the long-term protection of our built and natural heritage depends on adopting a more responsible and respectful approach to managing the environment, the implications of this principle on the conservation of resources of the recent past are only beginning to be understood.[56]

Underlying sustainability is the principle that it is more environmentally responsible to rehabilitate existing resources than to replace them. Indeed, the rehabilitation of existing buildings, especially those that are structurally sound and aesthetically appealing, can often be more economically viable than building anew. However, whereas the conservation of a traditional resource can be marketed on the basis of the ever-fashionable "lure of a bygone era," this is not yet true of most of the resources of the recent past. Despite increased awareness of their significance, it will be some time before the public, including those in the real-estate industry, acknowledges the full potential of the built heritage of the Modern era and before most jurisdictions introduce the same kinds of conservation incentives, guidelines, and legislation that apply to earlier heritage.[57]

Another drawback is that many buildings of the recent past are currently in a state of technical obsolescence — their exposed concrete is decaying or their curtain wall requires repair or replacement — and appropriate, economically viable conservation solutions are not as obvious as for earlier heritage.[58] Furthermore, the architecturally respectful and financially realistic conversion of properties that have outlived their original function to serve appropriate new uses requires not only a firm grasp of conservation but also an understanding of market trends, long-term cost analysis, and management strategies.[59]

Indeed, the integration of sustainability into the philosophy and practice of conserving the resources of the recent past depends on collaboration between real-estate development professionals and heritage-conservation professionals. The advancement of this theme would benefit from the presentation and analysis of case studies that demonstrate methodologies for addressing different aspects of this challenge.

Conclusion

While the last decade has witnessed considerable progress in the conservation of the built heritage of the recent past, appropriate approaches to a number of philosophical and practical questions are far from obvious. The importance of continued collaboration and dialogue among organizations, institutions, and government agencies — as well as among professionals, academics, researchers, and policymakers working at the local, national, regional, and international levels — cannot be underestimated.

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Notes

1. Council of Europe, *Twentieth-Century Architectural Heritage: Strategies for Conservation and Promotion* (Strasbourg: Council of Europe Press, 1994). See Selected Bibliography in this issue.

2. Council of Europe, "Principles for the Conservation and Enhancement of the Architectural Heritage of the Twentieth Century" (Recommendation No. R (91) 13 of the Committee of Ministers to Member States, adopted 9 September 1991), reproduced in ICOMOS, comp., *Seminar on 20th Century Heritage, Helsinki 18-19-VI-1995: Working Papers* (see Selected Bibliography), 14-16 and at http://www.icomos.org.

3. "Recommendations," in ICOMOS, comp., 2-3 or http://www.icomos.org.

4. "Conclusions," in ICOMOS and Universidad Autònoma Metropolitana, comps. *Seminar on 20th Century Heritage: Memory, Mexico, 1996*. See Selected Bibliography, 137-140, or http://www.icomos.org.

5. Deborah Slaton and Rebecca A. Shiffer, eds,. *Preserving the Recent Past* (Washington, D.C.: Historic Preservation Education Foundation, 1995). See Selected Bibliography.

6. Susan Macdonald, ed., *Modern Matters: Principles & Practice in Conserving Recent Architecture* (Shaftesbury, Dorset, U.K.: Donhead Publishing, 1996). See Selected Bibliography.

7. See Selected Bibliography for DOCOMOMO publications.

8. See Susan D. Bronson and Thomas C. Jester, "Mending the Modern," in this issue.

9. World Cultural Heritage falls into the following categories: "monuments, groups of buildings and sites," and "groups of urban buildings"; definitions can be found in the "Operational Guidelines for the Implementation of the World Heritage Convention" (rev. February 1996), http://www.unesco.org/whc.

10. "Recommendations," in ICOMOS, comp., 3, or http://www.icomos.org.

11. Marcella Sherfy and W. Ray Luce, *National Register Bulletin 22: Guidelines for Evaluating and Nominating Properties that Have Achieved Significance Within the Last Fifty Years* (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1979, rev. 1996).

12. Sherfy and Luce, 1.

13. Canada, *Historic Sites and Monuments Board of Canada: Policies, Criteria, Guidelines* (Ottawa, 1996), 16-20.

14. Susan D. Bronson, "Built Heritage of the Modern Era: Overview, Framework for Analysis, and Criteria for Evaluation," Framework Study for the Historic Sites and Monuments Board of Canada, Fall 1997. A detailed outline of the scope and period of the resources considered is included in Appendix 1.

15. Bronson, Appendix 3.

16. Council of Europe, "Principles"; "Recommendations," in ICOMOS, comp., 2-3; "Conclusions," in ICOMOS and Universidad Autónoma Metropolitana, comps., 137-140.

17. The Canadian Inventory of Historic Buildings, for example, documents over 210,000 cultural heritage resources, most of which predate World War I.

18. The municipality of Mississauga, Ontario, for example, is developing a customized inventory that is tied into its mapping system and registry records; it includes textual and visual information on all buildings and sites (permit applications, heritage status, architecture, historical data and information on context).

19. DOCOMOMO ISC/R, "Directives for the National/Regional Registers, the International Selection, and the World Heritage List: Definitions and Guidelines," photocopy, May 1995; discussion between Susan Bronson and France Vanlaethem, Chair, ISC/R, March 1997.

20. Carol D. Shull and Beth L. Savage, "Trends in Recognizing Places for Significance in the Recent Past," in Slaton and Shiffer, eds., II-4-II-13.

21. See Richard Longstreth, "When the Present Became the Past," in Antoinette Lee, ed., *Past Meets Future* (Washington, D.C.: The Preservation Press, 1992), 222 and note 25.

22. In England, where there is a cutoff of thirty years for listing except where resources are endangered, the public was invited in 1987 to suggest resources of national significance dating from 1940-57. Of the 70 recommendations, 52 were rejected because "the lack of a coherent and accessible body of research made it difficult for ministers and the public at large to place buildings of the program in context and appreciate what made the best of them special." In 1991 English Heritage undertook a three-year research program to "provide an academic background for listing recommendations and to enhance the public's understanding of and enjoyment of the post-war years." The studies, organized according to typological categories (higher education, housing and houses, entertainment, planned communities, etc.) provided a framework for comparative analysis and led to an initial selection of resources representing England's postwar heritage. English Heritage, *Something Worth Keeping? Post-War Architecture in England* (London: English Heritage, c. 1996); the program is also described in Martin Cherry, "Listing Twentieth-Century Buildings: The Present Situation," in Macdonald, ed., 5-14.

23. Bronson, 7-9, Appendix 6.

24. The Canada-wide survey, which involved discussions with about a hundred individuals involved in the conservation of resources of the Modern era, was carried out between January and March 1997. Bronson, Appendices 2, 3, and 4.

25. The five twentieth-century World Heritage Sites are: Auschwitz Concentration Camp, Poland (a World War II memorial site), inscribed in 1979; Parque Güell and Casa Mila in Barcelona, Spain (Antonio Gaudi, 1900-14), inscribed in 1984; Brasilia, Brazil (city designed by Lucio Costa and Oscar Niemeyer, 1956-60), inscribed in 1987; Skogskyrkogarden, Sweden (cemetery designed by Gunnar Asplund and Sigurd Lewerentz, 1915-20), inscribed in 1994; and the Bauhaus, with sites in Weimar (1904-25) and Dessau (1925-30), Germany, inscribed in 1996. The two additional sites nominated in 1997 are the Hospicio Cabānas in Guadalajara, Mexico (with murals by José Clemente Orzo, 1936-37), and the Palau de la Musica Catalana and the Hospital Sant Pau in Barcelona, Spain (an expression of Art Nouveau). Regina Durighello, ICOMOS Secretariat, Paris, "20th Century Heritage in the Context of the World Heritage Convention," in ICOMOS, comp., 26-28; *La Lettre du Patrimoine Mondial*, No. 13 (January 1997); memo from Regina Durighello to Susan Bronson, 25 April 1997.

26. "Operational Guidelines," article 24.

27. Shull and Savage, in Slaton and Shiffer, eds., II-3-II-14.

28. Sherfy and Luce, p. 17.

29. Regarding the National Historic Sites program, see Canada, *The Historic Sites and Monuments Board of Canada: An Introduction* (Ottawa: HSMBC, January 1997); *HSMBC: Policies, Criteria, Guidelines*. A second commemoration program, which focused on railway stations, was implemented in 1990 and is now substantially complete; at the end of 1995, 18% of the designated stations dated to 1930 or later. A third program involves buildings owned by the federal government by the Federal Heritage Buildings Review Office (FHBRO); as of February 1997, 27% of the buildings reviewed postdated 1929, and just under 19% of these were "classified" or "recognized" as Federal Heritage Buildings. Bronson, Appendix 3.

30. Bronson, 9-11.

31. "Operational Guidelines," paragraph 24b)ii; Bernard M. Feilden and Jukka Jokilehto, *Management Guidelines for World Cultural Heritage Sites* (Rome: ICCROM, 1993), 9-10.

32. "Cultural Resource Management Policy," in Canada, *Parks Canada Guiding Principles and Operational Policies* (Ottawa: Minister of Supply and Services Canada, 1994), 99-123. Heritage Railway Stations and Federal Heritage Buildings also enjoy protection against demolition or insensitive interventions.

33. Under some circumstances, however, development pressures and economic factors can lead to disrespectful rehabilitation projects and even demolition.

34. See book reviews in this issue.

35. In Canada three major archives are actively seeking material related to the built heritage of the Modern era: the Canadian Centre for Architecture, the Canadian Architecture Collection of McGill University, and the Canadian Architectural Archives of the University of Calgary. In the U.S. many archives are adding such material to their collections.

36. DOCOMOMO ISC/T, DOCOMOMO Technology Expertise Database (Eindhoven, The Netherlands: DOCOMOMO, 1996).

37. See Selected Bibliography.

38. See Selected Bibliography. Other articles in this *Bulletin* (in particular those by William B. Rose, Susan Buck, and Jeffrey Koerber, Larry R. Meyers and Lisa M. Puryear) demonstrate this point.

39. Council of Europe, "Principles"; "Recommendations," in ICOMOS, comp., 2-3; "Conclusions," in ICOMOS and Universidad Autónoma Metropolitana, comps., 137-140.

40. Susan Bronson, "Cormier's Seaplane Hangar in Pointe-aux-Trembles: More Than Just a North American Prototype," in *ARQ: Architecture Québec* 53 (1989), 17-19.

41. Wray, in Slaton and Shiffer, eds., III-4.

42. See review of *The New Spirit* in this issue.

43. Donald Albrecht, ed., *World War II and the American Dream: How Wartime Building Changed A Nation* (Cambridge, Mass.: MIT Press and National Building Museum, 1995).

44. Steven Mannell, ed., *Images of Progress, 1946-1996: Modern Architecture in the Waterloo Region* (Kitchener, Ontario: Kitchener/Waterloo Art Gallery, 1996).

45. Students at the University of Calgary are involved in a similar undertaking, and it is expected that a program will be soon initiated at DalTech (TUNS) in Halifax and the University of Victoria.

46. ICOMOS and Universidad Autónoma Metropolitana, comps., 139.

47. International and regional meetings on authenticity took place in 1994 and 1996. See Knut Einar Larsen and Nils Marstein, eds., *Conference on Authenticity in Relation to the World Heritage Convention: Preparatory Workshop, Bergen, Norway, 31 January - 2 February 1994* (Ricksantikvaren Directorate for Cultural Heritage, Norway: Tapir Forlag, 1994); Knut Einar Larsen, ed., *Nara Conference on Authenticity; Japan 1994: Proceedings* (UNESCO World Heritage Centre, Agency for Cultural Affairs (Japan), ICCROM, ICOMOS, 1995); Susan Buggey, "Inter-American Symposium on Authenticity and Management of Cultural Heritage," in *ICOMOS Canada Bulletin* 5 (1996), 46-48.

48. World Heritage Sites must "meet the test of authenticity in design, materials, workmanship or setting and in the case of cultural landscapes their distinctive character and components (the Committee stressed that reconstruction is only acceptable if it is carried out on the basis of complete and detailed documentation of the original and to no extent on conjecture)" ("Operational Guidelines," paragraph 24b)i). In the U.S. the evaluation of integrity is based on the significance of a property, how its distinguishing characteristics relate to its significance, and how change over time has affected those characteristics (U.S. Department of the Interior, *National Register Bulletin* 15, (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1995), 44-49). In Canada integrity is one of the five principles upheld by Parks Canada in its Cultural Resource Management Policy (Canada, *Parks Canada Guiding Principles and Operational Policies*, 105-106), and it has been proposed that it be considered in the preliminary criteria for the evaluation of the resources of the Modern era (Bronson, 11).

49. *National Register Bulletin* 15, 44.

50. The link between the basis for significance of a cultural resource and the characteristics that carry that significance and define the character of the resource was explored at a 1994 meeting organized by Parks Canada that focused on cultural landscapes and used the Rideau Canal as a case study. A methodology that directly linked the values of the site to the analysis of its authenticity created an evaluation process that considered site-specific factors and could thus guide the conservation program. Nora Mitchell, "Evaluating Authenticity of Cultural Landscapes: A Perspective from the U.S.," in Larsen, ed., 376-377.

51. "Nara Document on Authenticity," in Larsen, ed., xxiii. In the U.S. integrity is evaluated in terms of seven qualities: design, materials, workmanship, setting, location, feeling, and association (*National Register Bulletin* 15, 44-45).

52. The evaluation of the authenticity of potential World Heritage sites has been subjected to various interpretations, most quite flexible, over the last few decades (Henry Cleere, "The Evaluation of Authenticity in the Context of the World Heritage Convention," in Larsen, ed., pp. 57-66). In the U.S. and Canada some flexibility is also built into the evaluation and monitoring of historic properties (*National Register Bulletin* 15, 44-49; *Parks Canada Guiding Principles and Operational Policies*, 105-106).

53. Only one of the numerous presentations at the 1994 Nara Conference on Authenticity focused on the concept's relevance for the built heritage of the recent past. See H.A.J. and N. Tummers, "Authenticity of the Modern Movement," in Larsen, ed., 327-328.

54. This notion was expressed by various experts at the 1994 Nara conference on authenticity, including Bernd von Droste and Ulf Bertilsson, "Authenticity and World Heritage," in Larsen, ed., 7.

55. World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987).

56. Ibid.; National Park Service Sustainable Design Initiative.

57. See Hans de Jonge, "Redevelopment of Postwar Real Estate," in DOCOMOMO, *Curtain Wall Refurbishment: A Challenge to Manage* (Eindhoven, The Netherlands: DOCOMOMO, 1996); Richard Longstreth, "The Significance of the Recent Past," in *APT Bulletin* 23:2 (1991), 12-24; Mike Jackson, "Preserving What's New," in *APT Bulletin* 23:2 (1991), 7-11; Donald G. Iselin and Andrew C. Lemer, eds., *The Fourth Dimension in Building: Strategies for Minimizing Obsolescence* (Washington, D.C.: National Academy Press, 1993).

58. See articles by Wessel de Jonge, Paul E. Gaudette and Harry J. Hunderman, and Susan Macdonald, in this issue.

59. The authors would like to thank Ian Panabaker, who made a presentation on this topic at APT's 1996 conference in Winnipeg and has since carried out further research, for sharing his insight while this article was in preparation.



Further Readings

Books

Albrecht, Donald, ed. *World War II and the American Dream: How Wartime Building Changed a Nation.* Cambridge: MIT Press, 1995.

Allan, John. "The Conservation of Modern Buildings." In Mills, Edward D., ed. *Building Maintenance and Preservation: A Guide to Design and Management.* Rev. ed. London: Butterworth-Heineman Ltd., 1994.

Ambrose, James. *Construction Revisited: An Illustrated Guide to Construction Details of the Early 20th Century.* New York: John Wiley & Sons, 1994.

Architectural Engineering. New York: F.W. Dodge Corporation, 1955.

Ashurst, John, and Nicola Ashurst. *Practical Building Conservation Series.* Aldershot, England: Cower Technical Press, Ltd., 1988.

Ashurst, Nicola. *Cleaning Historic Buildings.* London: Donhead Publishing, Ltd., 1994.

Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities. Washington, D.C: Advisory Council on Historic Preservation, February 1991.

Banham, Reyner. *The Architecture of the Well-Tempered Environment.* London: Architectural Press, 1969.

Banham, Reyner. *A Concrete Atlantis.* Cambridge: MIT Press, 1986.

Bergeron, Claude. *Architecture du XXe siecle au Québec.* Montréal: Editions du Meridien, 1989.

Birnbaum, Charles A., ed. *Focus on Landscape Preservation.* Washington, D.C: The National Trust for Historic Preservation, 1993.

Birnbaum, Charles A., ed. *Preserving Modern Landscape Architecture.* Washington, D.C., and Cambridge: Spacemaker Press, 1999.

Birnbaum, Charles A., and Robin S. Karson. *Pioneers of American Landscape Design.* New York: McGraw-Hill, 2000.

Blake, Peter. *No Place Like Utopia: Modern Architecture and the Company We Kept.* New York: Alfred A. Knopf, 1993.

Blueprints for Modern Living: History and Legacy of the Case Study Houses. Cambridge: MIT Press, 1989.

Brand, Stewart. *How Buildings Learn.* New York. Viking/ Penguin Books, 1994.

Brookes, Alan J. *Cladding of Buildings,* 3rd ed.. New York: Routeledge, 1998.

Bruce, Alfred, and Harold Sandbank. *A History of Prefabrication.* New York: John B. Pierce Foundation, 1944. Reprinted, New York: Arno Press, 1972.

Bruegmann, Robert, ed. *Modernism at Mid-Century: The Architecture of the United States Air Force Academy.* Chicago: The University of Chicago Press, 1994.

Bureau of Architecture and Urbanism. *Toronto Modern Architecture 1945–1965.* Toronto: Coach House Press, 1987.

Burman, Peter, Keith Garner, and Leo Schmidt, eds. *The Conservation of 20th Century Historic Buildings.* York, England: The Institute of Advanced Architectural Studies, The University of York, 1996.

Bush, Donald J. *The Streamlined Decade.* New York: George Brasiller, 1975.

Cahan, Richard. *They All Fall Down: Richard Nickel's Struggle to Save America's Architecture.* Washington, D.C: The Preservation Press, 1994.

Chase, Stuart. *Men and Machines.* New York: The Macmillan Co., 1929.

Clark, Clifford Edward, Jr. *The American Family Home, 1800–1960.* Chapel Hill, North Carolina: University of North Carolina Press, 1986.

Clark Victor, S. *A History of Manufactures in the United States.* New York: McGraw-Hill, 1929.

Condit, Carl W. *American Building Art in the Twentieth Century.* New York: Oxford University Press, 1961.

Corn, Joseph J., ed. *Imagining Tomorrow.* Cambridge: MIT Press, 1986.

Cressy, Edward. *Discoveries and Inventions of the Twentieth Century,* second edition. London: G. Routledge and Sons, 1923.

Council of Europe. *Twentieth-Century Architectural Heritage: Strategies for Conservation and Promotion* (Cultural Heritage Series, No. 29). Strasbourg: Council of Europe Press, 1994.

Cowden, Adrienne Beaudet, comp. *Historic Concrete: An Annotated Bibliography.* Washington, D.C.: U.S. Dept. of the Interior, National Park Service, Preservation Assistance Division, 1993.

Cunningham, Alan, ed. *Modern Movement Heritage.* New York: Routledge, 1998

Dietz, Albert G.H. *Dwelling House Construction.* New York: D. Van Nostrand, 1946.

Dietz, Albert G.H. *Engineering Laminates.* New York: John Wiley and Sons, 1949.

Dietz, Albert G.H. *Materials of Construction: Wood, Plastics, Fabrics.* New York: D. Van Nostrand, 1949.

Dietz, Albert G.H. *Plastics forArchitects and Builders.* Cambridge: MIT Press, 1969.

DOCOMOMO International. DOCOMOMO Conference Proceedings. *First International Conference, September 12–15, 1990, Eindhoven, The Netherlands. Second International Conference, September 16–19, 1992, Dessau, Germany. Third International Conference, September 14–17, 1994, Barcelona, Spain. Fourth International Conference, September 18–22, 1996, Bratislava, Slovakia.*

Elliot, Cecil D. *Technics and Architecture.* Cambridge: MIT Press, 1992.

English Heritage. *Agreements for the Management of Listed Buildings.* London: English Heritage, 1995.

Fisher, Charles E., and Hugh C. Miller, eds. *Caring for Your Historic House.* New York: Harry N. Abrams, Inc., 1998.

Fisher, Charles E., ed. T*he Well-Appointed Bath: Authentic Plans and Fixtures from the Early 1900s.* Washington, D.C.: The Preservation Press, 1985.

Fishwick, Marshall, and J. Meredith Neil. *Popular Architecture.* Bowling Green, Ohio: Bowling Green Popular Press, 1974.

Fitch, James Marston. *American Building 1: The Historical Forces That Shaped It.* Boston: Houghton Mifflin Company, 1966.

Fitch, James Marston. *American Building 2: The Environmental Forces That Shaped It.* Boston: Houghton Mifflin Company, 1972.

Ford, Edward R. *The Details of Modern Architecture.* Cambridge: MIT Press, 1990.

Ford, James, and Katherine Morrow Ford. *Classic Modern Homes of the Thirties.* New York: Dover Publications, Inc., 1989.

Gayle, Margot, David W.Look, and John G. Waite. *Metals in America's Historic Buildings.* Washington, D.C: U.S. Department of the Interior, National Park Service, Preservation Assistance Division, 1992.

Giedion, Siegfried. *Mechanization Takes Command: A Contribution to Anonymous History.* New York: Oxford University Press, 1948.

Gideon, Sigfried. *Space,Time and Architecture.* Cambridge: Harvard University Press, 1949.

Gifford, Frederiek, et al. *Harlow: The Story of a New Town.* Stevenage, England: Publications for Companies, 1980.

Gillies, Mary Davis. *McCall's Book of Modern Houses.* New York: Simon and Schuster, 1951.

Goldstein, Barbara, ed. *Arts ~ Architecture: The Entenza Years.* Cambridge: MIT Press, 1990.

Gournay, Isabelle, ed. *Ernest Cormier and the Universite of Montréal/Ernest Cormier et l'Universite de Montréal.* Montréal: Centre for Architecture, 1990.

Graham, John Webb. *Winnipeg Architecture: The Red River Settlement, 1831–1960.* Winnipeg, Manitoba: The University of Manitoba Press, 1960.

Grattan, David W., ed. *Saving the Twentieth Century: The Conservation of Modern Materials.* Proceedings of Conference Symposium 1991, "Saving the Twentieth Century," Ottawa, Ontario, Canada. Ottawa: Canadian Conservation Institute, 1993.

Grimmer, Anne. *Keeping It Clean: Removing Dirt, Paint, Stains, and Graffiti From Historic Exterior Masonry.* Washington, D.C.: U.S. Department of the Interior, National Park Service, Preservation Assistance Division, 1988.

Gutman, Richard J.S. *American Diner: Then and Now.* New York: Harper Collins Publishers, 1993.

Hamm, Manfred. *Dead Tech.* San Francisco: Sierra Club Books, 1982.

Hatton, Hap. *Tropical Splendor: An Architectural History of Florida.* New York: Alfred A. Knopf, 1987.

Hess, Alan. *Googie: Fifties Coffee Shop Architecture.* San Francisco: Chronicle Books, 1985.

Hess, Alan. *Viva Las Vegas: After Hours Architecture.* San Francisco: Chronicle Books, 1993.

Hession, Jane King, Rip Rapson, and Bruce N. Wright. *Ralph Rapson: Sixty Years of Modern Design.* Afton, Minnesota: Afton Historical Society Press. 1999.

Hine, Thomas. *Populuxe.* New York: Alfred A. Knopf, 1986.

Hitchcock, Henry-Russell and Arthur Drexler. *Built in the USA: Post-War Architecture.* New York Simon and Schuster, 1952.

Hudnut, Joseph. *Architecture and the Spirit of Man.* Cambridge: Harvard University Press, 1949.

Hunt, William Dudley, Jr. *The Contemporary Curtain Wall: Its Design, Fabrication, and Erection.* New York: F.W. Dodge Corporation, 1958.

International Centre for the Study of the Preservation and the Restoration of Cultural Property (ICCROM). *Bibliography of Preservation & Conservation Information.* Rome: ICCROM, 1985.

International Council on Monuments and Sites (ICOMOS), comp. *Seminar on 20th Century Heritage,* Helsinki, 18–19 June 1995, working papers.

International Council on Monuments and Sites and Universidad Autonoma Metropolitana, comps. *Seminar on 20th Century Heritage,* Monterey, Mexico, 1996, working papers.

Jackson, Lesley. *'Contemporary'. Architecture and Interiors of the 1950s.* London: Phaidon Press, Ltd., 1994.

Jackson, Mike, guest ed. *Preserving What's New. APT Bulletin* 23, no.2 (1991).

Jackson, Mike, ed. *Commercial Archeology Bibliography: Resources for the Road.* Washington, D.C.: Society for Commercial Archaeology, 1995.

Jackl, John A., and Keith A.Sculle. *The Gas Station in America.* Baltimore: The Johns Hopkins University Press, 1994.

Jandl, Henry Ward, et al. *Yesterday's Houses of Tomorrow.* Washington, D.C.: The Preservation Press, 1991.

Jennings, Jan, ed. *Roadside America: The Automobile in Design and Culture.* Ames, Iowa: Iowa State University Press, 1990.

Jester, Thomas C., ed. *Twentieth-Century Building Materials: History and Conservation.* New York: McGraw-Hill, 1995.

Johnson, Donald L. *Assessment of 20th Century Architecture: Notes for Conservationists.* Australia: Flinders University of South Australia, 1980.

Kelly, Barbara M. *Expanding the American Dream: Building and Rebuilding Levittown.* Albany, New York: State University of New York Press, 1993.

Kelly, Burnham. *The Prefabrication of Houses.* Cambridge: MIT Press, 1961.

Knoblock, Philip G. *Architectural Details from the Early Twentieth Century.* Washington, D.C.: American Institute of Architects Press, 1994 (reprint of 1931 edition).

Kouwenhoven, John A. *Made in America: The Arts in Modern Civilization.* Garden City, New York: Doubleday, 1948.

Langdon, Philip. *Orange Roofs, Golden Arches.* New York: Alfred A. Knopf, 1986.

Lewin, Susan Grant, ed. *Formica ~ Design: From the Countertop to High Art.* New York Rizzoli International Publications, Inc., 1991.

Lewis, Michael D. *Modern Stone Cladding: Design and Instllation of Exterior Dimension Stone Systems, ASTM Manual 21.* Philadelphia: American Society for Testing and Materials, 1995.

Liebs, Chester H. *Main Street to Miracle Mile: American Roadside Architecture.* Boston: Little, Brown and Co., 1985.

Loewy, Raymond. *Industrial Design.* Woodstock, New York Overlook Press, 1979.

Longstreth, Richard. *City Center to Regional Mall: Architecture, the Automobile, and Retailing in Los Angeles, 1920–1950.* Cambridge: MIT Press, 1997.

Longstreth, Richard. *The Drive-In, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914–1941.* Cambridge: MIT Press, 1999.

Lowe, Jet. *Industrial Eye.* Washington, D.C.: The Preservation Press, 1986.

MacAlester, Virginia, and Lee MacAlester. *Field Guide to American Houses.* New York: Alfred A. Knopf, Inc., 1984.

Macdonald, Susan, ed. *Modern Matters: Principles and Practice in Conserving Recent Architecture.* Shaftesbury, Dorset: Donhead Publishing Ltd., 1996.

Mandelbaum, Michael. *The Nuclear Question: The United States and Nuclear Weapons, 1946–1976.* Cambridge: Cambridge University Press, 1979.

Margolies, John, and Emily Gwathmey. *Signs of Our Time.* New York: Abbeville Press, 1993.

Mason, Joseph B. *History of Housing in the U.S.: 1930–1980.* Houston: Gulf Publishing, 1982.

Mills, Edward D., ed. *Building Maintenance and Preservation: A Guide to Design and Management.* New York: Butterworth/Heinemann, 1994.

Morgan, John. *Conservation of Plastics: An Introduction.* London: Museum and Galleries Commission, 1991.

Morton, W. Brown III; Gary L. Hume, Kay D. Weeks, and H. Ward Jandl. *The Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings.* Washington, D.C.: U.S. Department of the Interior, National Park Service, Preservation Assistance Division, 1992.

Mostafavi, Mohsen, and David Leatherbarrow. *On Weathering: The Life of Buildings in Time.* Cambridge: MIT Press, 1993.

Mumford, Lewis. *Sticks and Stones.* New York: Boni and Liveright, 1925.

National Park Service (various authors). *Preservation Briefs.* Washington, D.C.: U.S. Department of the Interior, National Park Service, 1975–2000.

National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation. Washington, D.C.: U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1991.

National Park Service. *Twentieth Century Building Materials: 1900–1950.* Compiled by George M. Bleekman III, Ann Girard, Karin Link, Donald Peting, Anne Seaton, Jonathan Smith, Lisa Teresi Burcham, and Richa Wilson. Washington, D.C.: U.S. Department of the Interior, National Park Service, Preservation Assistance Division, 1993.

Patton, Phil. *Open Road: A Celebration of the American Highway.* New York: Simon and Schuster, 1986.

Ramsey, Charles G., and Harold Reeve Sleeper. *Traditional Details for Building Restoration, Renovation, and Rehabilitation.* New York: John Wiley & Sons, Inc., 1991.

Richards, James Maude. *An Introduction to Modern Architecture.* New York: Penguin Books, 1947.

Rose, James C. *The Heavenly Environment.* Hong Kong: Athens Art Publishing Company, 1987.

Rowe, Peter G. *Making the Middle Landscape.* Cambridge: MIT Press, 1991.

Royal Commission on the Historical Monuments of England. *A Change of Heart: English Architecture Since the War, a Policy for Protection.* London: English Heritage, 1992.

Schweitzer, Robert, and Michael W.R. Davis. *America's Favorite Homes.* Detroit: Wayne State University Press, 1990.

Sherfy, Marcella, and W. Ray Luce. *National Register Bulletin 22: Guidelines for Evaluating and Nominating Properties That Have Achieved Significance Within the Last Fifty Years,* revised edition. Washington, D.C.: U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1989.

Shiffer, Rebecca A., guest ed. *Cultural Resources from the Recent Past. CRM* 16, no. 6 (1993). This issue of *Cultural Resources Management* includes articles on recent past issues by Marco D'Agostini, Brian A. Butko, Elizabeth Calvit, John Connoboy, Katherine Hamilton-Smith, Gerron Hite, Thomas C. Jester, Dwayne Jones, Sara Amy Leach. Robert G. Lemon, Dennis Montagna, David G. Orr, Beth L. Savage, Thomas J. Schlereth, Mary Seelhorst, Rebecca Shiffer, and Amy Worden.

Shiffer, Rebecca A., and Sharon C. Park, guest eds. *Preserving the Recent Past. CRM* 18, no. 8 (1995).

Slaton, Deborah, and Rebecca A. Shiffer, eds. *Preserving the Recent Past.* Washington, D.C.: Historic Preservation Education Foundation, 1995.

Stern, Rudi. *Let There Be Neon.* New York: Harry N. Abrams, Inc., Publishers, 1979.

Stevenson, Katherine H., and H. Ward Jandl. *Houses by Mail: A Guide to Houses from Sears Roebuck and Company.* Washington, D.C.: Preservation Press, 1986.

Stratton, Michael, ed. *Industrial Buildings: Conservation and Regeneration.* New York: Routledge, 1999.

Stratton, Michael, ed. *Structure and Style: Conserving 20th Century Architecture.* London: E. and F.N. Spon, 1997.

Striner, Richard. *Art Deco.* New York: Abbeville Press, 1994.

Trieb, Marc, ed. *Modern Landscape Architecture: A Critical Review.* Cambridge: MIT Press, 1993.

Usher, Abbott, P. *A History of Mechanical Inventions.* Boston: Beacon Press, 1959.

Von Eckardt, Wolf, ed. *Mid-Century Architecture in America.* Baltimore: The Johns Hopkins Press, 1961.

Von Moos, Stanislaus. *Venturi, Scott Brown & Associates: Buildings and Projects, 1986–1998.* New York: Monacelli Press, 2000.

Wachs, Martin, and Margaret Crawford. *The Car and the City: The Automobile, the Built Environment and Daily Urban Life.* Ann Arbor: University of Michigan Press, 1992.

Walker, Peter, and Melanie Simo. *Invisible Gardens: The Search for Modernism and the American Landscape.* Cambridge: MIT Press, 1994.

Wallis, Michael. *Route 66: The Mother Road.* New York: St. Martins Press, 1990.

Weaver, Martin. *Conserving Buildings: A Guide to Techniques and Materials.* New York: John Wiley & Sons, Inc., 1993.

Webb, Michael. *The Magic of Neon.* Salt Lake City: Gibbs M. Smith, Inc., 1983.

Weidlinger, Paul. *Aluminum in Modern Architecture.* Louisville, Kentucky: Reynolds Metal Co., 1956.

Wright, Gwendolyn. *Building the Dream: A Social History of Housing in America.* Cambridge: MIT Press, 1983.

Wright, Gwendolyn. *Moralism and the Model Home.* Chicago: University of Chicago Press, 1980.

Wright, Henry. *Rehousing Urban America.* New York: Columbia University Press, 1935.

National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation. Washington, D.C.: U.S. Department of the Interior, National Park Service, Interagency Resources Division, rev. ed., 1991.

Yorke, F.R.S. *The Modern House in England,* third ed. London: The Architectural Press, 1948.

Articles and Papers

"Balancing Conservation with Improved Performance," (White House, Haslemere, by Connell and Ward, 1931). *Architects Journal* (16 February 1994).

Bergeron, Claude. "Le Modernisme venu du Nord: les eglises du Saguenay-Lac-Saint-Jean." *Society for the Study of Architecture in Canada Bulletin* 13, no. 3 (September 1988): 9–21.

Bergeron, Claude. "Rethinking an Image: Modern Church Design in Québec." *Twentieth-Century Art ~ Culture,* no. 1 (Spring 1990): 54–87.

Bluestone, Daniel. "Preservation and Renewal in Post-World War II Chicago." *Journal of Architectural Education* 47, no. 4 (May 1994): 210–223.

Brown, Wayde. "Modernism and Regionalism: Influences on the Work of Leslie Fairn." *Society for the Study of Architecture in Canada Bulletin* 14, no. 1 (March 1989): 14–18.

Connolly, James D., Michael J. Schleffler, and Deborah Slaton. "Diagnostics: Building Sealants." *Building Renovation* (September–October 1993): 49–52.

Cowell, Elspeth. "The Canadian Pavilion at the 1939 New York World's Fair and the Development of Modernism in Canada." *Society for the Study of Architecture in Canada Bulletin* 19, no. 1 (March 1994): 13–20.

Crosbie, Michael J. "Quakeproofing Landmarks." *Architecture* 81, no. 11 (November 1992): 119–123.

Crowe, Michael F. "Neon Signs: Their Origin, Use, and Maintenance." *APT Bulletin* 23, no. 2 (1991): 30–37.

Dean, Andrea Oppenheimer. "Renewing Our Modern Legacy." *Architecture* 79 (November 1990): 66–69.

Eckler, David. "The Sources for and Influences of Jacques Carlu's Eaton Auditorium, Toronto, 1930." *Society for the Study of Architecture in Canada Bulletin* 13, no. 4 (December 1988): 9–16.

"Ernest Carmier." *Journal of Canadian Art History* 13, no. 2 (1990) and 14, no. 1 (1991).

"Factory with a Facelift," (Boots D10 Building, Nottingham, 1930). *Architects Journal* (3 November 1994): 31–42.

Field, Dorothy. "Architecture in Alberta: The Moderne Style." *Alberta Past* 6, no. 1 (April 1990): 1.

Fulford, Robert. "The Rise and Fall of Modern Architecture" [Eberhard Zeidler]. *Saturday Night* 95, no. 10 (December 1980): 23–31.

Fulton, Gordon. "Benny Farm, Montréal, Québec." Historic Sites and Monuments Board of Canada, Agenda Paper, November 1993.

Fulton, Gordon. "Eight Border Crossing Facilities." Federal Heritage Buildings Review Office, Building Reports 91–101 (1991).

Goodstein, Ethel. "Contemporary Architecture and Canadian National Identity." *American Review of Canadian Studies* 18, no. 2 (Summer 1988): 127–159.

Hammon, Francoise. "Architecture du XXe siecle: naissance d'un patrimoine." *Monuments Historiques,* no. 161 (January/February 1989): 59–64.

Hammon, Francoise. "Le patrimoine moderne - incertitudes et paradoxes." *Historie de l'art,* no. 4 (December 1988): 114–116.

Henket, Hubertjan. "Documenting the Modern Movements." *World Architecture* 2, no. 3 (1990): 84–85.

Hurd, Mary. "The Evolution of Reinforced Concrete." *Building Renovation* (January/February 1993): 51–54.

Jackson, Mike. "Preserving What's New." *APT Bulletin* 23, no. 2 (1991): 7–11.

Jandl, H. Ward. "With Heritage So Shiny: America's First All-Aluminum House." *APT Bulletin* 23, no. 2 (1991): 38–43.

Jester, Thomas C. "Documenting, Evaluating, and Preserving Twentieth-Century Building Materials." *ASTM STP 1258 – Standards for Preservation and Rehabilitation.* Stephen J. Kelley, ed. Philadephia, Pennsylvania: American Society for Testing and Materials, 1995.

Kelley, Stephen J. "Curtain Wall Technology and the American Skyscraper." *The Construction Specifier* 43 (July 1990): 61–68.

Kelley, Stephen J. "Preserving Our Past for the Future." *ASTM Standardization News* (December 1990): 28–30.

Kreger, Robert David. "The Making of an Industrial Landscape: Case Studies of Air Force Bases, World War I to the Present." Ph.D. diss., University of Illinois, 1988.

Lee, Yvonne S. "The Dilemma of 'Listing' Modern Buildings." *Context: The Journal of Association of Conservation Officers* 44, (Letchworth, England: published for the Association of Conservation Officers by Hall-McCartney, December 1994).

Leubkeman, Christopher Hart. "Landmarks: TWA Terminal." *Progressive Architecture* 73 (1992): 96–108.

Liebs, Chester H. "Remember Our Not-So-Distant Past?" *Historic Preservation* (January–March 1978): 30–35.

Liscombe, Rhodri Windsor. "The Culture of Modernism: Vancouver's Public Libraries 1947–1957." *Architecture + Culture: Proceedings of the International Research Symposium at Carleton University,* 24–27 September 1992. Tim Donais, ed.; Trevor Boddy and Enn Kayari, co-chairs. Ottawa: School of Architecture, Carleton University, 1992, 358–361.

Liscombe, Rhodri Windsor. "Modes of Modernizing: The Acquisition of Modernist Design in Canada." *Society for the Study of Architecture in Canada Bulletin* 19, no. 3 (September 1994): 60–74.

Longstreth, Richard. "I Can't See It; I Don't Undersatnd It; and It Doesn't Look Old to Me." *Historic Preservation Forum 10* (Fall 1995): 6–15. Reprinted from Deborah Slaton and Rebecca Shiffer, eds. *Preserving the Recent Past* (Washington, D.C.: Historic Preservation Education Foundation, 1995).

Longstreth, Richard. "The Lost Shopping Center." *The Forum* 20 (October 1992). See also: Fleming, Ronald Lee. "Saving Shopping Centers: An Owlish View, or, Give a Hoot For Enhancement," and Jackson, Mike. "Response to 'The Lost Shopping Center,"' in *The Forum* 21 (April 1993); Shiffer, Rebecca A. "The Shopping Center Saga Continues"; Striner, Richard. "Some Answers for Ronald Lee Fleming"; and Heck Marlene Elizabeth. Editor's Note, in *The Forum* 22 (April 1994).

Longstreth, Richard. "The Significance of the Recent Past." *APT Bulletin* 23, no. 2 (1991): 12–24.

Lynch, Michael F. "What Are We Going to Do with the Recent Past?" *APT Bulletin* 23, no. 2 (1991): 6.

McMordie, Michael. "Modern Monuments." *Canadian Forum* 68, no. 681 (May 1978).

Mitchell, Robert A. "What Ever Happened to Lustron Homes?" *APT Bulletin* 23, no. 2 (1991): 44–53.

Monner, Gerard. "A propos de la protection du patrimoine du XXe siecle." *Les chafers de la recherche architecture,* nos. 24 and 25 (1989): 49–54.

Moore, Rowan. "Il mondo moderno invecchia." *Abitare,* no. 295 (April 1991): 252–256.

Neumann, Dietrich. "Primatic Glass." *Building Renovation* (March/April 1993): 57–60.

Ottavino, Kate Burns. "Replacement Alternatives." *Architecture* 80, no. 11 (November 1991): 117–120.

Parker, Alfred Browning. "Hold the Wrecking Ball: Are Contemporary Structures Worth Saving?" *Preservation Today* [Miami, Florida] (Spring 1991): 25–26.

Powers, Alan. "Industrial Buildings and Conservation." *Twentieth Century Architecture*, no. 1 (1994).

Prudon, Theodore H.M. "Casing Out Curtain Walls." *Building Renovation* (Winter 1994): 37–40.

Prudon, Theodore H.M. "Saving Face." *Architecture* 79, no. 11 (November 1990): 105–111.

Randall, Kathleen. "Reroofing: Tower Life Building." *Building Renovation* (November/December 1992): 50–55.

Rappaport, Nina. "Preserving Modern Architecture in the USA." *DoCoMoMo Journal* 11 (June 1994): 3942.

Rappaport, Nina. "Preserving the Monuments of Modernism." *Historic Preservation News* (December 1992): 20–21.

"Restoring a Milestone of Modernism," (De La Warr Pavilion, Bexhill-on-Sea, East Sussex, by Mendelsohn and Chermayeff, 1935). *Architects Journal* (16 February 1994).

Ricketts, Shannon. "Batawa: An Experiment in International Standardization." *Society for the Study of Architecture in Canada Bulletin* 18, nos. 3 and 4 (September/December 1993): 80–87.

Ricketts, Shannon. "The Former Toronto, Hamilton and Buffalo Railway Station, Hamilton, Ontario." Historic Sites and Monument Board of Canada, Railway Station Report RS–21, March 1991.

Rossiter, Sean. "The Firm that Built the Town" [Thompson, Berwick, Pratt and Partners]. *Vancouver* (September 1983): 42–62, 125–126.

Saint, Andrew. "Un revirement: la protection de l'architecture recense en Grande-Bretagne." *Revue de l'Art CNRS,* Paris (1993).

Schleffler, Michael J., and Slaton, Deborah. "Diagnostics: Stone Claddings." *Building Renovation* (May/June 1993): 53–56.

Seltzer, Helmut. "The Dessau Bauhaus." *ICOMOS Information* [ICOMOS and Edizioni Scientifiche Italiane, Paris, France, and Naples, Italy], no. 4 (1988).

Shadbolt, Douglas. "Postwar Architecture in Canada." *Canadian Forum* 58, no. 680 (April 1978): 6–9.

Stamp, Gavin. "La Thirties Society." *Monuments Historiques,* no. 155 (February/March 1988): 36–37.

Striner, Richard. "Preservation and the Recent Past." *National Trust for Historic Preservation Information Booklet No 69* (1993): 1–23.

Taylor, Joseph A. "Ceramic Tile in Commerce." *Building Renovation* (Fall 1994): 45–48.

Trebbi, Giorgio. "La conservazione del moderno." *Parametro* 155, no. 3 (April 1987): 10–11.

Treib, Marc, and Dorothee Imbert, eds., *Studies in the History of Gardens and the Designed Landscape*, April-June 2000.

Trelstad, Derek. "Cladding Revisited." *Building Renovation* (Fall 1994): 32–35.

Trelstad, Derek. "Repair: Hecht Company Warehouse." *Building Renovation* (July/August 1993): 28–33.

Tumak, Edgar A.C. "Protecting Our Recent Architectural Heritage? Requiem for the Former Ottawa Police Station." *Society for the Study of Architecture in Canada Bulletin* 19, no. 4 (December 1994): 100–103.

"US Architecture 1900–1950." *Progressive Architecture* 31 (January 1950): 49–115. (At the time this article appeared, the following editors were with the magazine: Thomas H. Creighton, Editor; Charles Magruder, Managing Editor; George A. Sanderson, Feature Editor; Burton H. Holmes, Technical Editor; Elsie Tupper, Margot W. Kamens, Elizabeth A. Wolff, Mary Agnes Morel, Viola S. Kaps, Assistant Editors. Advisors included Henry S. Churchill, James Marston Fitch, Talbot F. Hamlin, Carroll L.V. Meeks, and Fred N. Severud.)

Wagg, Susan. *Ernest Isbel Barott, Architecte/Architect: Une introduction/An Introduction. Catalogue d'une exposition presentee au Centre Canadien d'Architecture/ Catalogue of an exhibition held at the Canadian Centre for Architecture, Montréal,* 5 June–6 September 1985.

Weber, Andrew S., and Dennis K. Johnson. "Investigative Technique for Water Penetration." *APT Bulletin* 23, no. 2 (1991): 25–29.

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