The 20th Century Architecture of Frank Lloyd Wright (United States of America) No 1496rev

Official name as proposed by the State Party
The 20th-Century Architecture of Frank Lloyd Wright

Location
Oak Park, Illinois
Chicago, Illinois
Spring Green, Winsconsin
Los Angeles, California
Mill Run, Pennsylvania
Madison, Winsconsin
Scottsdale, Arizona
New York, New York
United States of America

Brief description
The property "The 20th-Century Architecture of Frank Lloyd Wright" focusses upon the influence that the work of the American architect, Frank Lloyd Wright (1867-1959), had, not only in his own countrybut, on the architecture of the 20th century and the recognized masters of the Modern Movement in architecture in Europe. The qualities of what is known as 'organic architecture' developed by Wright, including the open plan, the blurring between exterior and interior, the new uses of materials and technologies and the explicit responses to the suburban and natural settings of the various buildings, have been acknowledged as pivotal in the development of modern architectural design in the 20th century.

The property includes a series of 8 buildings designed and built over the first half of the 20th century; each component has specific characteristics, representing new solutions to the needs for housing, worship, work, education and leisure. The diversity of functions, scale and setting of the components of the series fully illustrate the architectural principles of 'organic architecture'.

Category of property
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 8 *monuments*.

1 Basic data

Included in the Tentative List
30 January 2008, as "Frank Lloyd Wright Buildings"

Background
The nomination "Key Works of Modern Architecture by Frank Lloyd Wright" was examined by the World Heritage Committee at its 40th Session (Istanbul, 2016); the Committee adopted Decision 40 COM 8B.30, which reads as follows:

The World Heritage Committee,

1. *Having examined Documents WHC/16/ 40.COM/8B, and WHC/16/40.COM/INF.8B1,*

2. *Refers the examination of the nomination of Key Works of Modern Architecture by Frank Lloyd Wright, United States of America, on the World Heritage List, in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre if requested to*

   a) *redefine the rationale for a series of components (not necessarily the ones currently nominated) that might have the potential to justify Outstanding Universal Value through conveying the way one or more exceptional facets of the oeuvre of Frank Lloyd Wright influenced the architecture of the 20th century,*

   b) *define more structured management for individual components coordinated by the Frank Lloyd Wright World Heritage Council,*

   c) *examine and pursue opportunities to revise the nominated property boundaries, expand buffer zones and enhance protection in and beyond the buffer zones for component sites in relation to the attributes of potential Outstanding Universal Value;*

3. *Encourages the State Party to consider inviting ICOMOS to offer advice on the above recommendations in the framework of the Upstream Process.*

At the request of the State Party, an ICOMOS Advisory Process was carried out in two phases: a first one from August 2016 to February 2017 and a second one which ended in April 2018. The outcomes of this process and ICOMOS recommendations have been taken into account by the State Party and incorporated in the revised version of the nomination dossier.

Consultations and Technical Evaluation Mission
Desk reviews have been provided by ICOMOS International Scientific Committees, members and independent experts.

During the assessment of the original nomination dossier, two ICOMOS technical evaluation missions visited different parts of the property: the first from 1 to 13 September 2015 and the second from 11 to 23 September 2015. After the World Heritage Committee decision in 2016, no further ICOMOS technical evaluation mission visited the nominated property.

Additional information received by ICOMOS
After the reception of the revised nomination dossier, no further information was requested to the State Party.

Date of ICOMOS approval of this report
13 March 2019

2 Description of the property

Note: The revised nomination dossier contains detailed descriptions of this property, its history and its state of conservation. Due to limitations on the length of evaluation reports, this report only provides a short summary of the most relevant aspects.

Description and History

The work of Frank Lloyd Wright exercised a remarkable influence not only in his own country, the United States of America, but also far beyond, including some of the masters of the European Modern Movement in architecture. The revised nomination dossier includes a series of 8 buildings projected over the first half of the 20th century, selected out of some 400 buildings still surviving. They are:

- Unity Temple, Oak Park, Illinois, designed 1905, constructed 1906-1909;
- Frederick C. Robie House, Chicago, Illinois, designed 1908, constructed 1910;
- Taliesin, Spring Green, Wisconsin, begun 1911, constructed 1911-1959;
- Hollyhock House, Los Angeles, California, designed 1918, constructed 1918-1921;
- Fallingwater, Mill Run, Pennsylvania, designed 1935, constructed 1936-1939;
- Herbert and Katherine Jacobs House, Madison, Wisconsin, designed 1936, constructed 1936-1937;
- Taliesin West, Scottsdale, Arizona, begun 1938;
- Solomon R. Guggenheim Museum, New York, New York, designed 1943, constructed 1956-1959.

Unity Temple, Oak Park, Illinois, designed 1905,constructed 1906-1909.

Unity Temple was constructed in the Chicago suburb of Oak Park, where Wright lived and worked between 1887 and 1909. It sits on a corner plot of the urban grid pattern, facing one of the main roads. Built entirely out of monolithic reinforced concrete, the building consists of two rectangular blocks, one for the church and the second for teaching and office spaces, linked by an entrance foyer. The main space was designed to accommodate four hundred worshippers in multiple levels of seating under a coffered ceiling lit by twenty-five art glass skylights. Wright designed the interior and exterior finishes, as well as lighting fixtures and furniture, all of which are still in place.

Frederick C. Robie House, Chicago, Illinois, designed 1908, constructed 1910.

This horizontal house with low pitched roof, massive central chimney, long rows of low windows and continuous roofed balconies that over sail the ground floor rooms, is the largest of a group of similarly formed houses in Oak Park, which are identified with the Prairie School of Architecture that Wright and others developed in the first decade of the 20th century. The term “Prairie” was seen to symbolise the expansive qualities of the Illinois and the Midwest prairie landscapes.

Taliesin, Spring Green, Wisconsin, begun 1911, constructed 1911-1959.

Taliesin was constructed by Wright as his home and studio in a hilly rural area of Wisconsin. It was begun in 1911 and became his summer studio after Taliesin West was built in 1938. Various buildings underwent re-building work after two major fires as well as expansion over a period of some fifty years. The estate also includes Hillside Home School, the drafting studio, galleries, theatre, and Midway Barn, Tan-y-deri, the residence for his sister and the related windmill. The buildings, with low pitched roofs, stone clad walls, and overhanging balconies cascade irregularly down the hill from a tower-like belvedere. They have views across a lake to more hills beyond or to an enclosed hill garden designed by Wright.

Hollyhock House, Los Angeles, California, designed 1918, constructed 1918-1921.

Hollyhock House was built around a pillared courtyard and is ornamented with hollyhock motifs in cast concrete and stained glass. The house was built as a nucleus for a cultural centre at the moment when Hollywood was taking off as a movie centre. The form of the house reflects Spanish patio house traditions and has references to ancient Mayan forms. The large courtyard was designed for theatrical performances and the surrounding roof terraces linked by stairways and bridges provided viewing platforms for drama and dance. Wright designed furniture for the open plan living and dining rooms, most of which remains in the house. Many of its architectural features seem to herald later works in Los Angeles such as the so-called ‘textile-block’.

Fallingwater, Mill Run, Pennsylvania, designed 1935, constructed 1936-1939.

Fallingwater is sited on top of a small waterfall in the southern Laurel Highlands. Built as a weekend retreat for Edgar and Liliane Kaufmann, the three storey house sits on reinforced concrete slabs, apparently cantilevered from a central chimney, and covered with random stone paving. The slabs provide the interior floors and extensive open terraces overlooking the small gorge. The vertical walls are of locally quarried stone. Extensive plate glass windows of the large main living room and smaller studies and bedrooms provide thin barriers between the inside and outside.

Herbert and Katherine Jacobs House, Madison, Wisconsin, designed 1936, constructed 1936-1937.

This small house was the first of Wright’s so-called Usonian houses, of which over 300 were built. They aimed to be modest single storey American suburban dwellings, with open plan living room and dining/kitchen. Often L-shaped and usually with a small garden, they were constructed from standardised building components. The houses were specifically designed for the American landscape, with a strong visual connection between indoor and outdoor spaces.

Taliesin West, Scottsdale, Arizona, begun 1938.
Began in 1938 as Wright's winter home and as a studio for the Taliesin apprentices, Taliesin West started as a simple camp in a desert setting. Over the last two decades of Wright's life it developed extensive permanent buildings of angular forms with walls faced with rough local rubble stone and with translucent roofs. The extensive complex of interconnected spaces includes studios, conference rooms, dining room, apartments and guest rooms as well as Wright's large beamed living room.

Solomon R. Guggenheim Museum, New York, NewYork, designed 1943, constructed 1956-1959.
The museum sits opposite Central Park and occupies one block of the New York City grid plan in an affluent neighbourhood. The building consists of three major components: the main spiral-shaped rotunda, the smaller, circular administrative office wing and the cantilevered bridge that connects the two. The dominant spiral of the rotunda coils around five times beneath a twelve sided domed skylight. The design of the entire complex is based on circles, triangles, and lozenges. The Guggenheim is constructed of concrete reinforced with steel rods. The original driveway was closed off later to create a museum store. In 1992 an addition was built that was more or less based on Wright's original master plan. Further underground space was added in 1996.

History and development
The section is presented by the State Party in two parts: a study on the work of Frank Lloyd Wright in the historical context and, secondly, the specific history of each of the components. Due to length restrictions of this report, a summary is presented on general aspects of the history of the serial property.

The period covered by the components of this nomination is characterized by dramatic technological and social change both internationally and in the United States of America. The effects of industrialization had a significant impact on people and redefined the nature of both work as well as living and working environments. Pioneering architects of the early-modern era included the leading practitioners of the Art Nouveau movement in several European countries. The Arts and Crafts Movement became a major influence on the architects, designers, and craftspeople of the Vienna Secession and the Deutscher Werkbund. Architecture based on mechanization ideals was embraced by architects in some European countries in the decade preceding World War I.

The Chicago School was a significant American expression of modernism in the late 19th and early 20th centuries, marrying a practical embrace of up-to-date internal structural technologies with the clear aesthetic expression of structure on building exteriors.

In 1887 Frank Lloyd Wright arrived in Chicago during the building boom that followed the 1871 fire. Working first for Joseph Lyman Silsbee, Wright then left to join the more progressive firm of Adler and Sullivan, where he worked until 1893. Progressive American architects and their clients wanted an authentic American architecture, formally and functionally connected to the inherent beauty of natural "organic" principles. This new architecture was meant to embrace and exemplify American democracy and as such, Chicago and Prairie School architects, including Wright, influenced popular aspects of American architecture and visual culture.

Following a series of transitional experiments in the 1890s, Wright finally synthesized his thinking in what is known as the Prairie School or Prairie Style, which culminates with the Frederick C. Robie House, with its dynamic cantilever, horizontal form, open plan, and technical innovations. Within the historic context of American architecture of the late 19th and early 20th centuries, Wright's Prairie School designs are arguably the most radical expression of modernist ideals in the United States before World War I, expressing the dynamic American society of the time. Among Wright's early public buildings, the Unity Temple in Oak Park stands out; in this building Wright abandoned the concrete frame in favour of monolithic reinforced concrete, in conjunction with the structural cantilever, to create a plasticity of space defined by intersecting and overlapping planes.

These early works drew the attention of European modernists who admired their shifting planes, abstract masses and open plans when they were presented in the German publication by Ernst Wasmuth of 1911.

Wright continued to embrace progressive modernist ideals of form, ornament and space during the 1920s, ever experimenting with new ways of designing. The Hollyhock House in Los Angeles embraced a monumentality of form while continuing to show his love of abstract ornament based on nature. This building marked a new direction in Wright's work as he explored new landscape and cultural forms very different from that of the Midwest; he turned to regional sources such as Mayan architecture and the Spanish colonial patio house.

During the 1930s, Wright designed a number of buildings that revived his public image and set the stage for the last two decades of his career. In addition to Fallingwater, these included buildings for the S.C. Johnson Company and a more spatially modest home for Herbert and Katherine Jacobs. He also began an ongoing construction and expansion of Taliesin West, his winter home and studio in Arizona.

At Taliesin West, Wright abandoned the prevailing styles to once again demonstrate the primary importance of the landscape to the design of a modern building, providing an original response to a harsh desert site. The Usonian Houses, beginning with the Herbert and Katherine Jacobs House, introduced a design and construction method accessible to clients of moderate means, easily adapted to sites in different parts of the country and that could meet the functional needs of varied clients. Many of the features of the Usonian house would be incorporated into

suburban housing after World War II, influencing the design of post-war suburban houses throughout the United States

After World War II, rationalist ideas about architecture gained popularity, especially for commercial and institutional buildings. In contrast, some architects turned away from such design theories and aesthetics in favour of more personal expressions of form and materials in their search for visually and spatially powerful architecture. Wright, in his search for greater spatial effects and dynamic forms, also focused on such personal expressions; in his case, focusing on extruding the spiral from the circle. It was in one of his most famous works, the Solomon R. Guggenheim Museum, in which he more fully realized the spiral's capacity for energizing space.

It becomes clear that the Modern Movement was not limited to one overarching school of thought; many trends encompassing a variety of personal expressions were also present. One approach, organicism, or what Wright termed "organic architecture," paralleled and contrasted with much of the rational modernism of Le Corbusier, Mies van der Rohe and Walter Gropius.

In summary, designs and buildings of Frank Lloyd Wright had an important influence over the development of architecture in the 20th century. His works were sourced by several previous ideas and by the specific socio-cultural American conditions and landscape.

Boundaries

The area of the 8 components totals 26.369 ha, with buffer zones totaling 710.103 ha.

For 5 of the 8 components, (Unity Temple, the Frederick C. Robie House, Hollyhock House, the Herbert and Katherine Jacobs House, and the Solomon R. Guggenheim Museum), the boundaries of the nominated zones correspond to their respective National Historic Landmark boundaries. For Taliesin, Fallingwater, and Taliesin West, which are located in expansive natural settings, the boundaries are proposed to encompass the primary designed buildings and their immediate settings, while the much larger boundaries of the National Historic Landmarks contribute to the buffer zones, thus ensuring that the larger settings are protected.

ICOMOS notices that in the case of Taliesin, some architectural and landscape components of the estate are not included in the nominated area, although they are encompassed in the National Historic Landmark boundaries and in the proposed buffer zone. The State Party explains that "though designed by Wright, they fulfilled primarily functional roles in the estate and do not exhibit to any notable degree the 'organic' qualities (relation to the landscape, rooms extended diagonally out to terraces, meandering forms incorporating outdoor spaces, adaptation of Japanese forms) that comprise the outstanding values of the main Taliesin house". ICOMOS considers that, though protected by the federal designation, the State Party could envisage a future minor modification of boundaries to include these items within the nominated area.

Each of the components of the serial nomination has its own buffer zone. They have been established according to the specific setting of the components. In the case of components located in urban or suburban areas, the buffer zones encompass the inmediate surroundings of the buildings and include specific provisions to ensure a supplementary protection of the nominated items. In relation to the original nomination, the proposed buffer zones of the Herbert and Katherine Jacobs House and Hollyhock House have been enlarged. For those components where the architectural design considered views of the surrounding natural landscape (Taliesin, Fallingwater and Taliesin West), the State Party has ensured that critical views are protected within the buffer zones.

For Robie House, while acknowledging that local and university provisions are in place, ICOMOS considers that the State Party should consider to ensure control of potential development impact in Woodlawn Garden, diagonally opposite the series' component.

ICOMOS consideres that the boundaries of the nominated and buffer zones for each of the components are, in general, adequate, but the State Party could envisage the extension of the nominated area in Taliesin and the buffer zone in Robie House.

State of conservation

Based on the information provided by the State Party and the observations of the ICOMOS technical evaluation missions, ICOMOS considers that the overall state of conservation of the components of the series is very good. Details on active conservation measures are described in the Conservation section of this report.

Unity Temple is in very good state of conservation, following a comprehensive repair and restoration project undertaken between April 2015 and June 2017.

The Frederick C. Robie House has recently undergone an extensive restoration to return the building to good condition.

In Taliesin, all of the buildings and landscape features proposed for inscription are, overall, in a good state of conservation; a number of significant conservation projects have been undertaken since 2015. Hollyhock House is presently in a good state of conservation with all building components and systems in good condition.

Fallingwater is in a good state of conservation. In 2002, a major rehabilitation of the terraces was undertaken in order to arrest the deformation of the concrete terraces. In 2012, new cracks appeared along the tops of the reinforced concrete bolsters supporting the first floor and an old crack reopened on the master terrace. In 2013, electronic monitors were installed on the building but have not recordedserious further changes.

The Herbert and Katherine Jacobs House is in very good condition; the most recent work has been the replacement of the flat roof surface. Taliesin West is in a good state of conservation; a conservation and preservation programme to address building problems has been implemented.

The Solomon R. Guggenheim Museumis in a good state of conservation. An extensive preservation and conservation campaign for the exterior was undertaken from 2005 to 2007.

Factors affecting the property
Based on the information provided by the State Party and the observations of the ICOMOS technical evaluation missions, ICOMOS considers that the main factors affecting the property are development pressures and natural disasters.

For most sites, there is no evidence of current adverse development pressures on the site or in the buffer zone and wider settings. The one main exception is Taliesin West; the nearby City of Scottsdale has expanded and is heading towards the site. Currently the site is separated from the suburban sprawl, but will impact it eventually as even the buffer zone is zoned for development. There is also potential for the impact of development at the Robie House, where the missing and height of potential new development in the immediate neighbourhood could overshadow the relationship of the building to its urban setting.

Earthquakes are a serious threat for Hollyhock House; they are almost certain to happen at sometime, but preventive measures have been taken. After the 1994 Northridge earthquake an extensive conservation and stabilization program was carried out at Hollyhock House and the most recent project (2009-2012) included additional seismic retrofitting.

Flooding is mainly a threat for Fallingwater but disaster preparedness plans are in place.

Fire is the main threat to sites that lack of fire suppression strategies and where related systems are designed for life-safety and not necessarily to save the buildings or the collections. The Guggenheim Museum is the only building with a reliable fire suppression system in place.

ICOMOS notes that while certain aspects of risk management have been well attended to in some component sites, overall there is a lack of risk management plans for all the sites.Though provisions are in place, risk management plans, which encompass not only the buildings but, where appropriate, their contents and setting, should be elaborated upon and implemented.

3 Proposed justification for inscription

Proposed justification
The nominated serial property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The series illustrates a full range of ways in which Wright's unique approach to architectural design fused form with spirit to influence the course of architecture in both North America and beyond.
- Each building has strong individual characteristics, presenting a specific aspect or facet of a new architectural solution to the needs of Americans for housing, worship, work, and leisure.
- The buildings employ geometric abstraction and spatial manipulation as a response to functional and emotional needs and are based literally or figuratively on nature's forms and principles. In adapting inspirations from global cultures, they break free of traditional forms and facilitate modern life.
- The substantial range of function, scale, and setting in the series underscores both the consistency and the wide applicability of these principles, which are often called "organic architecture."
- The series showcases innovations such as the open plan, the blurring of the boundary between interior and exterior, new uses of materials such as steel and concrete, as in cantilevered construction, new technologies such as radiant heating, the embrace of the automobile and explicit responses to natural settings. Such features are subordinated to designs that integrate form, materials, technology, furnishings, and setting into a unified whole.

Comparative analysis
The comparative analysis is presented in three parts: identification of comparable properties relating to the proposed attributes of Outstanding Universal Value, the comparison of properties and proposed Outstanding Universal Value and, finally, the identification of comparative Frank Lloyd Wright properties showing the selection process for the nominated series and those identified as possible future extensions to the series.

In the first part, the State Party has identified architectural movements during the same period of the nominated serial property, as well as bodies of works by architects represented on the World Heritage List, on tentative lists, and other architects relevant to the comparison. The architectural movements identified are Art Nouveau, Secession, Jugendstil and Modernism; the Arts and Crafts Movement in Great Britain and the United States; Expressionism and its antecedents; Dutch Modernism and De Stijl; Art Deco and the Modern Movement, including American Modernism.

Bodies of works and buildings related to those movements inscribed on the World Heritage List are extensive and include works by recognised masters of the Art Nouveau, Art Deco and Modern Movements (including Antoni Gaudí, Victor Horta, Ludwig Mies van der Rohe, Luis Barragan, Walter Gropius, and Le Corbusier).

In terms of tentative lists, the State Party has identified bodies of work and buildings of Henry van de Velde, Cubanacan (Cuba, relevant to the Arts and Crafts movement), Alvar Aalto, Alvaro Siza's Architecture Works in Portugal Sanatorium Zonnestraal (Netherlands, relevant to the Modern Movement), Napier Art Deco Historic Precinct, and the timeless, humanistic architecture of Jože Plečnik. Other bodies of work not included on the World Heritage List or tentative lists are those of Ludwig Mies van der Rohe, Walter Gropius and Alvar Aalto.

In the second part of the study, the State Party has compared the nominated serial property with other architectural movements and bodies of work, on the basis of the three attributes proposed to convey the Outstanding Universal Value of the series.

Attribute 1: Creation of an architecture responsive to functional and emotional needs through geometric abstraction and spatial manipulation
The State Party considers that while the comparable movements and architectural bodies of work exhibit elements of formal abstraction, spatial manipulation, blurring of interior and exterior space, and structural innovation, none employ it in a way that focused on functional and emotional needs to the same elevated degree as this series. The State Party highlights the influence of Wright on movements such as De Stijl, or architects such as Le Corbusier, Ludwig Mies van der Rohe, Walter Gropius or Alvar Aalto, who also created works with open plan. In the case of Le Corbusier, Mies van der Rohe and Gropius, some differences with the body of works by Wright lie on the more intellectual aim (Le Corbusier), less emotional effect (Mies) and rationalism and austerity (Gropius). Although Aalto moved from functionalism to a more organic language, the State Party considers that it rarely achieved Wright's level of unified expression. In summary, the nominated series is distinguished by a highly consistent use of geometric abstraction for both functional and emotional effect.

Attribute 2: Design inspired by nature's forms and principles
It is stated that, in general, the architecture of the 20th century progressively moved further away from connections to the natural world. Movements such as Art Nouveau or the body of works by Gaudí used nature as a source of inspiration. Wright's works during this period, however, were notable for the consistent reference to nature's forms and principles, but in abstracted form, and always integrated with his use of materials. Though architects of the Modern Movement employed a unity of design, this was generally expressed through rational simplicity rather than Wright's elaboration of ornament integrated with the larger design; many modern architects looked rather to industrial sources for inspiration in materials and finishes, which further distanced their connection to nature. Overall, however, the tendency in 20th century architecture was to focus on functional values and a preoccupation with the machine aesthetic; this series stands apart in its fidelity to the goal of integrating concepts of space and structure into a single organism.

Attribute 3: Architecture responsive to an evolving American experience.
The State Party considers that while many architects in the 20th century were interested in solving issues related to housing, their efforts were more often directed to the collective user, not individualistic programs tailored to client wishes or needs. The architects of the Modern Movement pursued universal solutions that were intentionally not tied to specific places or cultures. According to the State Party, Wright created solutions that fit the needs, both functional and emotional, of modern life beyond the borders of the United States.

As a summary, and in relation to criterion (ii), proposed by the State Party, it is argued that a number of common themes run through the development of architecture in the first half of the 20th century. What distinguishes this serial property is the distinct and comprehensive solution offered to these issues, an architectural vision expressed in specific architectural forms that, though they evolved considerably in form and expression over a sixty-year span, were remarkably consistent. Although a number of other modern works of architecture exhibit to some degree one or more of the attributes that characterize the global interchange of ideas and influence of Wright's architecture, none did so in a way that incorporated Wright's organic principles in all three critical attributes, and none did so with the same effect and influence, and over such a sustained period of time.

In the third part of the comparative analysis, the selection process to define the components of the series and those identified for possible future extensions is explained. Out of some 430 existing buildings and structures by Frank Lloyd Wright, the State Party has focussed on 37 located in the United States of America, based on the American Institute of Architects list and those considered National Historic Landmarks, and 4 outside the country.

The group of 41 buildings was considered under criterion (ii); many of them may not necessarily contribute to that criterion as they were not critical to an interchange of ideas in a global context. The Frank Lloyd Wright World Heritage Committee verified the existence of such influence first by identifying the work of other architects that manifest it in two primary ways: imitative interchange and transformative interchange. These interchanges were identified by examining the body of scholarly and critical publications, the exhibitions of Wright's work, the visual evidence of the buildings' influence in the work of other noted architects or by way of written accounts of a building's effect on them. Finally, the selection committee considered the properties' integrity and authenticity,

which resulted in the disqualification of several works. On this basis, the 8 components of the nominated series were selected, with the possibility of a future extension of the series to include 5 other buildings locates in the United States of America and 1 in Japan.

Buildings that may be considered for a future extension to the nomination are: Ward Willits House (Highland Park, Illinois, 1902), Tazaemon Yamamura House (Ashiya-shi, Japan, 1918), Alice Millard House / La Miniatura (Pasadena, California, 1923), S.C. Johnson Administration and Building and Research Tower (Racine, Wisconsin, 1935; 1944), Paul Hanna House /Honeycomb House (Stanford, California, 1936), Herbert and Katherine Jacobs House II (Madison, Wisconsin, 1946). The nomination dossier includes information on how these components could further contribute to the proposed outstanding universal value of the series and to the attributes that convey it. ICOMOS considers that, when the assessment of required conditions will be completed, these structures could enhance the integrity of the series.

ICOMOS considers that the methodology for the comparative analysis is adequate, so too the selected movements and bodies of works corresponding to the same period of the nominated series. ICOMOS considers that the State Party succeeds in demonstrating how the nominated series is exceptional in the framework of the proposed three attributes and criterion for inscription and the influence of Frank Lloyd Wright's works over the first decade of the century.

With regard to the approach for the selection of buildings to include in the nominated series, and in future potential extensions, ICOMOS considers that the State Party has undertaken a rigorous work of selection based on the proposed attributes and on the contribution that each of the components could provide to the proposed Outstanding Universal Value of the series.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Criteria under which inscription is proposed

The serial property is nominated on the basis of cultural criteria (ii).

Criterion (ii): 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;

This criterion is justified by the State Party on the grounds that the nominated series demonstrates an important interchange in the discourse that changed architecture on a global scale during the first half of the 20th century. The eight components of the serial property illustrate different aspects of a new approach to architecture consciously developed for an American context taking advantage of new materials and technologies, but which was also inspired by principles of the natural world and nurtured by other cultures and eras, particularly Japanese design traditions. These innovative ideas and the resulting unified architectural works were noted in European architectural and critical circles early in the century and modern architects in different regions of the world acknowledged the influence of Wright of their own work. Although Frank Lloyd Wright sought to establish new forms appropriate to the history, character, habits and geography of the United States of America, his buildings were suited to modern life in many countries, and in their fusion of spirit and form they evoked emotional responses that were universal in their appeal. Together, the series shows a comprehensive approach to architectural problems rather than showcasing individual buildings.

ICOMOS considers that the nomination dossier provides abundant information on the aspects mentioned to justify criterion (ii), especially the influence of the architecture of Frank Lloyd Wright in his own and in other countries. The table on pages 196-197 of the nomination dossier clearly explains the contribution of each of the components of the serial property to criterion (ii) on the basis of the three attributes proposed by the State Party and justifies the composition of the series.

ICOMOS considers that the nominated serial property meets criterion (ii) and that the serial approach is justified.

Integrity and authenticity

Integity

As a serial nomination, integrity refers to whether the component parts of the nomination sufficiently cover the attributes needed to demonstrate the Outstanding Universal Value suggested by the State Party. For each individual site, integrity relates to the completeness and coherence of sites in relation to their ability to display their contribution to the nominated value.

With regard to the series, the State Party has explained the methodology and process of selection of components on the basis of the proposed Outstanding Universal Value, attributes and criterion for inscription. In the nomination dossier, there is a clear explanation on how each of the components contributes to illustrating different aspects of the Outstanding Universal Value and the 3 proposed attributes and, as an ensemble, the components are proven to have exerted an influence on architecture over the first half of the 20th Century. ICOMOS considers that the criteria for the selection of components of the serial property are adequate and that the components parts reflect clear cultural and architectural links. Each of the components contributes to the proposed Outstanding Universal Value of the serial property in a defined and discernible way.

As for each of the components of the serial property, their boundaries include all the necessary elements to express their significance. The extension of the boundaries in 3 components located in relation to wider natural settings is adequate for a more accurate representation of the

relationships between the buildings and their natural surroundings. The components of the serial property include the buildings and interior furniture and all are overall adequately protected, which prevents from adverse effects. For Taliesin, a minor modification of the boundaries of the nominated area, to encompass all the structures designed by Wright and the landscape, could enhance the integrity of the individual component.

Authenticity

Authenticity of the whole serial property relates to the ability of the sites as a group to convey the Outstanding Universal Value as nominated. The conditions of authenticity for individual sites are met when their cultural values, as recognized in the nomination criteria proposed, are truthfully and credibly expressed through a variety of attributes, including form and design, materials and substance, use and function, location and setting and aspects related to traditions and other forms of intangible heritage.

In the case of modern architecture, it becomes necessary to keep in mind that new materials and construction techniques, or new uses of traditional materials, were used sometimes on an experimental basis, with no precise knowledge on how those elements could react over time. This is why, in many cases, modern buildings have been the object of extensive restoration works, including replacement of original components parts, in order to respond adequately to functional requirements or adaptation to new uses.

As a whole, the proposed series conveys its values through the proposed attributes. On the basis of their intrinsic characteristics, each of the component parts contributes to those attributes.

As for components of the serial nomination, each of the sites has remained largely unchanged since their construction. In some sites, the level of remaining original materials is high, but in a number, however, changes have been made and while the original forms remain sufficiently intact, and the modifications can be seen to be reasonable, and proportionate in relation to supporting the continued use of the building.

Most of the nominated sites are still used for their original purposes, contributing positively to their authenticity. The relationship between the sites and their settings is in general acceptable; the residential low density areas where some of the buildings are located (Unity Church, Robie House, Hollyhock House, Herbert and Katherine Jacobs House) have not experimented drastic changes in scale over time. In the case of buildings located in a natural setting (Taliesin, Fallingwater, Taliesin West) only Taliesin West poses some challenges because of the expansion of the city of Scottsdale.

In some cases structural problems have had to be resolved that have led to changes in structures and materials. Almost since its construction, water penetration was a problem at Unity Temple, with Wright himself undertaking initial repairs; many subsequent interventions, including the last extensive restoration, mean that the authenticity of materials and substance is not intact, but overall the form of the building remains largely true to the intentions of the architect. The Jacobs House has experienced significant changes to its building fabric since construction. Major portions of the concrete slab foundation have been replaced and large sections of the roof structure have been strengthened. The house has been extended at both ends; nevertheless overall the spirit of the original intention prevails and the repairs can be read as proportionate.

At the Robie House, there have been significant changes to its building fabric since construction; however, its form and footprint have been retained and its materiality sympathetically handled.

One site where conservation issues could impact on authenticity is at Taliesin. The authenticity of the materials and substance of the house have been well sustained, but the wider estate, which is inextricably linked to the house faces a range of conservation challenges which potentially impact the values of the house. The whole estate needs to be seen as an entity needs and managed and conserved as a cultural landscape.

In Taliesin West, the harsh desert environment has led to repeated replacement of certain building elements, such as the canvas roof and the wooden beams of the drafting room and its adjacent pergola which have been replaced with contemporary materials for durability and sustainability. However, the original desert masonry continues to be visually paramount within the complex.

The desert landscape to which Taliesin West responded is now under development pressures. During Wright's time, its landscape setting had begun to change, with high tension wires built in close proximity to an important view, causing Wright to direct a major re-orientation of the growth of the campus complex. Today urban development is increasingly close, and the property has been zoned for suburban scale subdivision. The long views of the powerful desert landscape, still convey a strong sense of place, but changes in the nearer landscapes are beginning to impact negatively.

ICOMOS considers that the authenticity of the series has been demonstrated and that component sites present an acceptable degree of authenticity; the changes and replacements of material component parts must be understood as a means to keep their forms and uses.

ICOMOS considers that, despite some issues related to the authenticity of materials and substance, the requirements of integrity and authenticity have been met for the whole series.

Evaluation of the proposed justification for inscription
ICOMOS considers that the comparative analysis, as proposed by the State Party, has demonstrated the exceptionality of the serial nomination in a global context and the justification for criterion (ii) is adequate. Seeking responses for a specific socio cultural context, Wright's buildings inspired many other architects and influenced the development of modern architecture at international level.

The serial property itself and its individual components exhibit an acceptable degree of integrity; although some components underwent restoration interventions, a situation quite common when dealing with modern architecture, all of them have retained their form and design and most of them their original uses and settings, which allows noting an acceptable degree of authenticity.

Attributes
The revised nomination is based on 3 main attributes; for each of them, the State Party has proposed 3 sub-attributes.

Attribute 1: Creation of an architecture responsive to functional and emotionalneeds through geometric abstraction and spatial manipulation
1A. Spatial continuity expressed through the open plan and blurredtransitions between interior and exterior spaces
1B. Dynamic forms that employ innovative structural methods and aninventive use of new materials and technologies
1C. Richness of experience created through contrast and carefullycomposed paths of movement

Attribute 2: Design inspired by nature's forms and principles
2A. Integral relationship with nature.
2B. Unity of design expressed through integration of the parts to the whole.
2C. Intrinsic qualities of materials expressed.

Attribute 3: Architecture responsive to an evolving American experience
3A. Changing modes of living are addressed
3B. Primacy of the individual and individualized expression
3C. Transforming inspirations from other places and cultures

ICOMOS considers that the attributes are adequate to demonstrate the Outstanding Universal Value of the serial property and that each of the components contribute to convey it in an appropriate manner.

4 Conservation measures and monitoring

Conservation measures
The nomination dossier includes detailed information on active conservation measures for each of the components of the serial nomination.

At Unity Temple, the recent restoration (2015-2017) addressed all aspects of building restoration and upgrades needed to safeguard the immediate and long-term viability and sustainability of the building's exterior and interior, decorative, and environmental components. In the Robie House, the work on the property was carried out in several phases beginning with exterior work in 2002; between 2007 and 2009, a second phase of primarily interior preservation work was undertaken and, from 2015-2017, the Trust commenced work on the interior restoration.

In Taliesin, recent works include the repair of several parts of the building; current projects underway include roofing and drainage projects in the Hillside complex in the buffer zone. As for Jacobs House, the cyclic maintenance project was carried out as recommended in the Jacobs House Restoration and Preservation Plan.

Some of the problems in Taliesin West were caused by the experimental nature of much of the original construction; work in recent years has focused on repair and replacement of the site's utility infrastructure. Comprehensive upgrades to the gas line, water system and electrical system are in process.

Monitoring
For each of the components of the serial property, the State Party has identified key indicators to monitor the state of conservation of the buildings, according to their specific characteristics; the periodicity of the inspections and the location of records are summarised in the nomination dossier. Responsible persons for monitoring have also been reported.

ICOMOS notices that indicators are mostly related to buildings' component materials and, in the cases of Fallingwater and Taliesin West, to landscape features. The indicators, though, are not directly related to the attributes proposed by the State Party to convey the Outstanding Universal Value of the serial property.

ICOMOS considers that the current monitoring indicators are adequate but do not clearly relate to the attributes that convey the Outstanding Universal Value and need to be augmented.

5 Protection and management

Documentation
The State Party reports that all the components of the series perform a routine inventory and perform an ongoing inspection of structures and buildings, with the

exception of the Herbert and Katherine Jacobs House where an inventory of personal property is performed less frequently. Financial records and administrative documents such as annual reports, meeting minutes, and correspondence are produced and stored, with their copies, by each site individually. Recordkeeping style varies by site, where they may be stored digitally on a museum-grade database, assembled as part of a professional appraisal, or as a series of photographs. Federal legal documents; management plans and structural documentation; and conservation procedures) also retained by the Frank Lloyd Wright Building Conservancy. The Frank Lloyd Wright Building Conservancy also maintains records of the Frank Lloyd Wright World Heritage Council (FLWWH Council) meetings and minutes as well as correspondence between it and the individual sites, the National Park Service and ICOMOS.

Legal protection

All of the components of the serial property are listed on the National Register of Historic Places and recognized as National Historic Landmarks (NHL), which is the highest possible national protection. Since this designation only affects actions resulting from decision-making on a Federal level, the strongest legal protection instruments for privately owned historic properties reside at the local government level or through private conservation easements. Some of the components are also protected on the basis of the regulation of the states where they are located.

The protective measures for each component of the series have been set out in the nomination dossier in detail. These comprehensive (but disparate measures) include conservation procedures, the designation of Historic Districts and Historic Landmark status, municipal zoning ordinances, covenant agreements, historic/cultural monument protection ordinances, charters, as well as deed restrictions and trust agreements.

Management system

The management coordination body is the Frank Lloyd Wright World Heritage Council, established in 2012 via a Memorandum of Agreement among the Frank Lloyd Wright Building Conservancy and the owners and/or representatives of the owners of the individual component properties. Its purpose is to provide coordinated management of the property, based in cooperation and guided by a common understanding of values, principles, and objectives. The Council performs its functions by, among its main actions, holding regular meetings; advising on annual reports from each component site that provide information on conservation and management; serving as a collaborative resource for the preservation and management of the component sites; promoting the property; promoting research and recommending on proposals for future extensions of the property.

The Frank Lloyd Wright Building Conservancy coordinates the work of the Council; it is an NGO with offices in Chicago, organized for the purpose of preserving and protecting the remaining works of Frank Lloyd Wright. The Council serves as an advisory body, and its recommendations do not supersede individual site management plans or local, state, or national preservation laws, ordinances, or regulations.

Unity Temple, Oak Park

The Unity Temple Unitarian Universalist Congregation continues to use the building and is responsible for regular maintenance. The Unity Temple Restoration Foundation is responsible for the comprehensive rehabilitation of the building. A new position of Building Engineer has been announced (2018), who will be responsible for developing and overseeing a maintenance program that will monitor the state of conservation; once the Building Engineer is hired, a maintenance plan will be created. A Master Conservation Plan exists (2006).

Frederick C. Robie House, Chicago

The Frank Lloyd Wright Trust manages the Robie House. Guiding documents include the Master Plan for the Restoration and Adaptive Use (1999), the Robie House Preservation Plan (2002), the Robie House Maintenance Manual (2015) and the Core Staff Training Manual. The Preservation Plan is updated annually by the Trust's Preservation Architect; this review informs the next year's budget planning process. The Trust is currently in the process of developing the Robie House Comprehensive Conservation Management Plan, whose completion is foreseen for April/May, 2019. The process will include input from the Preservation Committee and the public; the plan will incorporate all existing standards and plans that have been previously developed into one comprehensive plan for the building and site and will include a section on Visitor Management and Daily Visitor Operations and risk assessment.

Taliesin, Spring Green

The Frank Lloyd Wright Foundation is the owner and primary management responsible for the site. It has contracted Taliesin Preservation, Inc. (TPI), a local charitable organization, which operates public programming and secures support for preservation efforts through public and private funding channels. Guiding documents include Taliesin Preservation Policy (revised May 2013), Taliesin TPI Frank Lloyd Wright Foundation 2014 Memorandum of Understanding, Taliesin Stabilization and Restoration Master Plan (2008), Strategic Landscape Plan (1998) and Taliesin Historic Landscape Report (1999). A comprehensive management document, prepared by Foundation staff in 2018-19, will address for both Taliesin and Taliesin West all aspects of management policies, including interpretation, staff training, volunteer management, risk management, and maintenance, as well as conservation. A cyclical maintenance plan will be completed within the next year.

Hollyhock House, Los Angeles
The building is owned by the City of Los Angeles; the Department of Cultural Affairs (DCA) is responsible for the administration and conservation and prepares the annual budget. The Department of Recreation and Parks manages the Barnsdall Park landscape beyond the immediate setting of Hollyhock House; the Department of General Services is responsible for general building maintenance under the direction of DCA and the curator. The decision making process for conservation at Hollyhock House and its immediate setting is authorized and guided primarily by the Operating Agreement for Barnsdall Park Cultural Facilities, which establishes the conservation goals and standards for the long term preservation of the property and gives the Curator authority to identify and undertake conservation work. The Historic Structures Report provides more detailed guidance for specific conservation actions and is updated as needed. A general management plan that might clarify the management structure has not yet been drawn up.

Fallingwater, Mill Run
The site is managed by the owners, the Western Pennsylvania Conservancy (WPC), a private, non-profit organisation. A Fallingwater Advisory Committee, founded by the son of the original owner oversees the quality conservation management decisions. Preservation Maintenance Plan (2010) addresses routine and cyclical maintenance activities including housekeeping, informs the development by the Fallingwater senior staff of three-year strategic plans, which is approved by the Director and WPC Board. The 2018-2020 WPC Strategic Plan includes goals, objectives and actions for preservation, collections, education, visitor services, public relations, administration and capital improvements.

Herbert and Katherine Jacobs House, Madison
The house owner is responsible for all conservation planning and maintenance work. An offsite house manager monitors the house when the owner is absent and arranges tours with prior approval by the owner. The owner contracts with preservation specialists as needed for advice and to execute projects. Jacobs House Management Plan (October 2015) provides a preservation philosophy, outlines key areas of concern that will be monitored and a routine maintenance schedule. The owner maintains a complete record of major conservation activities during his ownership. The City of Madison also maintains a record of building permits issued for the property.

Taliesin West, Scottsdale
The Frank Lloyd Wright Foundation Taliesin West uses the site for its educational activities. Taliesin West Preservation Plan, Phase 1, was completed in May 2015 and includes a chronology of the buildings, a statement of preservation philosophy, assessment, recommendations, and priorities for conservation. Phase 2, which will be prepared in 2018-19, will address for both Taliesin and Taliesin West all aspects of management policies, including interpretation, staff training, volunteer management, risk management, and maintenance, as well as conservation. A Preservation Oversight Committee reviews and advises on conservation projects. Following the development of the strategic plan each year, an operating plan for the year is established on a departmental basis, laddering up to the overall goals and objectives of the strategic plan. This plan is approved by the President and CEO of the Foundation. Progress toward goals is measured routinely and reported quarterly to the Foundation's Board of Trustees.

Solomon R. Guggenheim Museum, New York
A general management plan as such has not been provided, the only plan is a Capital Project Plan (2013-2018). The overall day to day management structure appears effective.

Visitor management
All the buildings are open to the public; in the case of the Herbert and Katherine Jacob House tours are arranged on request and are scheduled in advance. Since components of the serial property vary greatly in their situations, the Frank Lloyd Wright World Heritage Council does not plan to develop a visitor management strategy that would fit all eight buildings in all instances. However, the Council has identified principles of visitation that include the following: monitoring indicators that will help establish baselines for limits of acceptable change to each property; provision of accommodations for disabled persons in accordance with the Americans with Disabilities Act; respect for the building's original function; guaranty of a high quality visitor experience; ensuring funds are in place to support the sites' operational and preservation needs through the development of an appropriate business plan and compelling vision to engage stakeholders.

Besides this general introduction, the State Party reports in detail on visitation provisions for each of the components of the serial property, including tours and programmes, access and parking, visitors information, amenities and safety and area amenities.

ICOMOS understands that it becomes difficult to establish a common visitors' strategy for such a diverse group of buildings. Although the general principles established by the Frank Lloyd Wright World Heritage Council can be considered adequate, what is not clear is whether those principles are already in place or are planned for the future.

Community involvement
The nomination dossier does not include specific information on community involvement in the elaboration of the nomination. Taking into account the nature of the components of the series, there are no traditional communities directly associated to the sites.

Evaluation of the effectiveness of the protection and management of nominated property

ICOMOS notices that the protective instruments are adequate for each of the components of the serial property. Together with the individual management systems, these aspects appear to be adequate since the buidings exhibit a very good state of conservation. ICOMOS notices that there is a wide array of conservation and management instruments in place but only in a few components of these have been included in a management plan.

The Frank Lloyd Wright World Heritage Council constitutes the basis for a coordinated management of the serial property. Althoug its aims and functions are clearly established, as it is stated that the Council serves as an advisory body and its recommendations do not supersede individual site management plans or legal instruments at all the three levels of government, it is not totally clear what its capacity to guide the accurate management of the property and of its individual components is.

ICOMOS considers that updated information on the progress of the visitors' management strategy is required.

ICOMOS considers that the coordinated management of the serial property through the Council can be considered acceptable, but its functions should be reinforced in its capacity of advisory body. For individual components, the elaboration of management plans, summarising existing conservation and management instruments and including risk management, could contribute to a more appropriate approach to management.

6 Conclusion

Although conceived as responses to the requirements of a specific geographic and socio-cultural context, that of his own country, Frank Lloyd Wright architectural works had a significant influence that goes far beyond the boundaries of the United States of America. It is possible to identify different periods exhibiting, in the framework of some constant principles, summarised in the attributes proposed by the State Party, a permanent attitude of research for architectural innovation. Frank Lloyd Wright works of the first decade of the 20th century strongly impacted on the development of modern architecture in Europe; later production was always welcomed and it is possible to state that together with Le Corbusier and Ludwig Mies van der Rohe, Frank Lloyd Wright can be considered as one of the most influential architect of his century.

By Decision 40 COM 8B.30, the World Heritage Committee requested the State Party to revise the original nomination dossier on the bases of the following recommendations:

a) redefine the rationale for a series of components that might have the potential to justify Outstanding Universal Value through conveying the way one or more exceptional facets of the oeuvre of Frank Lloyd Wright influenced the architecture of the 20th century.

The revised nomination has beenr educed to 8 buildings. The State Party has deeply revised the arguments that supports the nomination, the attributes that convey the Outstanding Universal Value and the justification for inscription on the World Heritage List. This revised nomination is based on the interchange of human values over a specific span of time on developments in architecture. The State Party has opted for concentrate on the influence Wright's work had globally and on how his work is related to different architectural movements of the late 19th and 20th centuries. Through comprehensive scholar research, verified in the revised comparative analysis, the refinement of the definition of the attributes and the justification for the proposed criterion for inscription, the revised nomination succeeds in demonstrating such an influence and how each of the components of the serial property contribute to its Outstanding Universal Value.

The criteria for selection of components have been clearly and convincingly explained and the summary tables included in the nomination dossier help to explain why these buildings have been selected and how they contribute to the Outstanding Universal Value of the series.

b) define more structured management for individual components coordinated by the Frank Lloyd Wright World Heritage Council,

The State Party has provided additional information related to the management system of each of the individual components of the serial property and, especially, to the coordinating body, the Frank Lloyd Wright World Heritage Committee. Although some of the components do not have a management plan, the legal protection, for both nominated and buffer zones, the management instruments, the conservation plans and the provisions for risk and visitors management permit the verification of an adequate management system that becomes evident in the very good state of conservation of the individual components. Some additional recommendations on these issues can, however, be expressed.

What remains unclear is the role of the Frank Lloyd Wright World Heritage Committee in the decision-making process for the components of the serial.

c) examine and pursue opportunities to revise the nominated property boundaries, expand buffer zones and enhance protection in and beyond the buffer zones for component sites in relation to the attributes of potential Outstanding Universal Value;

As explained in the nomination dossier, the boundaries of nominated zones for three of the individual components (Taliesin, Fallingwater and Taliesin West) have been expanded in order to encompass their immediate settings, both natural and designed landscapes that are intimately related to the buildings. The extension of the nominated zone in Taliesin could contribute to a better understanding of values of the site through the inclusion of all of the structures designed by Wright as well as the landscape in which they are set.

The buffer zones for two individual components (Hollyhock House and Herbert and Katherine Jacobs House) have been expanded and for those components where the architectural design considered views of the surrounding natural landscape (Taliesin, Fallingwater and Taliesin West), the State Party has ensured that critical views are protected within the buffer zones. In the cases where the buffer zones have not been revised, a set of state and/or local legal provisions ensure the additional protection to the nominated areas. The State Party should consider the possibility of extension of the buffer zone for the Frederick C. Robie House.

In summary, ICOMOS considers that the State Party has responded satisfactorily to the requests by the World Heritage Committee.

7 Recommendations

Recommendations with respect to inscription
ICOMOS recommends that the 20th Century Architecture of Frank Lloyd Wright, United States of America, be inscribed on the World Heritage List on the basis of **criterion (ii).**

Recommended Statement of Outstanding Universal Value

Brief synthesis

The 20th Century Architecture of Frank Lloyd Wright focusses upon the influence that the work of architect, had, not only in his country, the United States of America, but more importantly, on architecture of the 20th century and upon the recognized masters of the Modern Movement in architecture in Europe. The qualities of what is known as 'Organic Architecture' developed by Wright, including the open plan, the blurring between exterior and interior, the new uses of materials and technologies and the explicit responses to the suburban and natural settings of the various buildings, have been acknowledged as pivotal in the development of modern architectural design in the 20th century.

The property includes a series of eight buildings designed and built over the first half of the 20th century; each component has specific characteristics, representing new solutions to the needs for housing, worship, work, education and leisure. The diversity of functions, scale and setting of the components of the series fully illustrate the architectural principles of "organic architecture".

The buildings employ geometric abstraction and spatial manipulation as a response to functional and emotional needs and are based literally or figuratively on nature's forms and principles. In adapting inspirations from global cultures, they break free of traditional forms and facilitate modern life. Wright's solutions would go on to influence architecture and design throughout the world, and continue to do so to this day.

The components of the series include houses both grand and modest (including the consummate example of a "Prairie" house and the prototype "Usonian" house); a place of worship; a museum; and complexes of the architect's own homes with studio and education facilities. These buildings are located variously in city, suburban, forest, and desert environments. The substantial range of function, scale, and setting in the series underscores both the consistency and the wide applicability of those principles. Each has been specifically recognized for its individual influence, which also contributes uniquely to the elaboration of this original architectural language.

Such features, related to innovation are subordinated to designs that integrate form, materials, technology, furnishings, and setting into a unified whole. Each building is uniquely fitted to the needs of its owner and its function and, though designed by the same architect, each has a very different character and appearance, reflecting a deep respect and appreciation for the individual and the particular. Together, these buildings illustrate the full range of this architectural language, which is a singular contribution to global architecture in spatial, formal, material, and technological terms.

The Outstanding Universal Value of the serial property is conveyed through attributes such as spatial continuity expressed through the open plan and blurred transitions between interior and exterior spaces; dynamic forms that employ innovative structural methods and an inventive use of new materials and technologies; design inspired by nature's forms and principles; integral relationship with nature; primacy of the individual and individualized expression and transforming inspirations from other places and cultures.

Criterion (ii): The 20th Century Architecture of Frank Lloyd Wright demonstrates an important interchange in the discourse that changed architecture on a global scale during the first half of the 20th century. The eight components illustrate different aspects of Wright's new approach to architecture consciously developed for an American context; the resulting buildings, however, were in fact suited to modern life in many countries, and in their fusion of spirit and form they evoked emotional responses that were universal in their appeal. Reacting against prevailing styles in the United States, this approach took advantage of new materials and technologies, but was also inspired by principles of the natural world and was nurtured by other cultures and eras. These innovative

ideas and the resulting unified architectural works were noted in European architectural and critical circles early in the century and influenced several of the trends and architects of the European Modern Movement in architecture. Wright's influence is also noticeable in the work of some architects in Latin America, Australia and Japan.

Integrity

The serial property contains all the elements necessary to express its Outstanding Universal Value since it encompasses the works generally understood by critics and other architects to have been most influential. Each component highlights a different aspect of the attributes that demonstrate this influence and contributes to illustrating different aspects of the Outstanding Universal Value in a defined and discernible way, and to reflect clear cultural and architectural links. As an ensemble, they prove to have exerted an influence on architecture over the first half of the 20th Century.

The boundaries of each of the components include all the key elements to express their significance, although a minor boundaries modification in Taliesin, to include all the structures and gardens designed by Wright, would allow a better understanding of the whole property. The boundaries in components located in relation to wider natural settings allow an accurate representation of the relationships between the buildings and their surroundings. The components of the serial property include the buildings and interior furniture and all are overall adequately protected; none suffers from adverse effects of development or neglect. Each building has benefited from careful and comprehensive conservation studies and expert technical advice to ensure a high level of preservation.

Authenticity

Most of the components of the serial property have remained remarkably unchanged since their construction in their form and design, use and function, materials and substance, spirit and feeling. Conservation of each of the buildings, when needed to correct long-term structural issues or repair deterioration, has been in accordance with high standards of professional practice, ensuring the long-term conservation of original fabric wherever possible, and the significant features of each site; in all cases work has been based on exceptionally complete documentation. Very few features have been modified; the changes and replacements of material component parts must be understood as a means of retaining their forms and uses. In cases where the original function has changed, the current use is fully consistent with the original design.

The relationship between the sites and their settings is in general acceptable; the residential low density areas where some of the buildings are located has not experimented drastic changes in scale over time, although this is an aspect that must be considered in the protection and management systems. In the case of buildings located in natural settings, only Taliesin West poses some problems because of the expansion of the city of Scottsdale.

Management and protection requirements

Each property has been designated by the United States Department of the Interior as an individual National Historic Landmark, which gives it, under federal law, the highest level of protection. One of the components of the series is owned by a local government; the others are privatly owned by non-profit organizations, foundations and an individual. Each building is protected from alterations, demolitions, and other inappropriate changes through deed restrictions, local preservation ordinances and zoning laws, private conservation easements, and state law. Active conservation measures have been carried out for all of the components.

Each site has an effective management system that makes use of a suite of planning and conservation guidance. The management coordination body is the Frank Lloyd Wright World Heritage Council, established in 2012 via a Memorandum of Agreement between the Frank Lloyd Wright Building Conservancy and the owners and/or representatives of the owners of the individual component properties. The Frank Lloyd Wright Building Conservancy, an NGO with offices in Chicago organized for the purpose of preserving and protecting the remaining works of Frank Lloyd Wright, coordinates the work of the Council. Since the Council has an advisory capacity, its role in the decision making process should be strengthened.

The development and implementation of management plans for those components which do not already have them is recommended; risk preparedness and visitor management must be considered for all of the components of the serial property.

Key indicators to monitor the state of conservation of the buildings according to their specific characteristics have been identified; they are mostly related to buildings materials and, in the cases of Fallingwater and Taliesin West, to landscape features. The indicators, though, are not directly related to the attributes proposed by the State Party to convey the Outstanding Universal Value of the serial property.

Additional recommendations

ICOMOS further recommends that the State Party give consideration to the following:

a) Considering the possibility of minor boundary modifications of the area in Taliesin in order to encompass all the structures designed by Frank Lloyd Wright,

b) Strengthening the protection of the setting of the Robie House, in particular to control potential development impact in Woodlawn Garden, by

considering the possibility of a minor boundary modification of the buffer zone,

c) Strengthening the capacity of the Frank Lloyd Wright World Heritage Council in order to ensure the appropriate coordinated management of the serial property,

d) Elaborating upon and implementing management plans for those individual components where they do not exist, in order to encapsulate the existing conservation and management instruments in place, including risk and visitors management;

ICOMOS encourages the State Party to proceed to the extension of the series in the future, when the conditions for the additional components are established.

Revised map showing the location of the nominated components

Unity Temple

Robie House

Fallingwater House

Guggenheim Museum, interior architecture