World Monuments Fund/Knoll MODErnism Prize

2014 award to The Finnish Committee for the Restoration of Viipuri Library

vith

The Central City Alvar Aalto Library, Vyborg



for the restoration of Viipuri Library Vyborg, The Russian Federation

Designed by Alvar Aalto 1927-1935

Jury Citation

THE 2014 WORLD MONUMENTS FUND/KNOLL MODERNISM PRIZE

is awarded to the Finnish Committee for the Restoration of Viipuri Library with the Central City Alvar Aalto Library. Located in Vyborg, Russia, the library was designed and completed by Alvar Aalto from 1927 to 1935 and brilliantly restored by the committee with diligence, perseverance, and unflagging attention to the highest preservation standards over more than two decades from 1992 to 2013.

An icon of twentieth-century architecture, Viipuri Library is one of Aalto's most important buildings from the years in which he was adventurously exploring a new modernist vocabulary; indeed, photographs of the building soon made him known around the world. The library reflects the emergence of Aalto's distinctive combination of organic form and materials with the principles of clear functionalist expression that was to be the hallmark of his architecture. The clear progression of spaces that lends a civic gravitas is still embedded in Aalto's interest in Nordic classicism, but the frank embrace of a full palette of modern materials—from glass wall construction to the remarkable undulating wooden ceiling in the lecture hall—and to explorations of new types of skylighting make the building a landmark not only of modernist architecture but also of library design.

Despite early and widespread acclaim for the library, its survival was never assured. War, unstable political relations, and multiple changes in international borders ultimately resulted in the former Finnish city of Viipuri becoming Vyborg, part of the expanded territory of the USSR. During Soviet times, access was limited and even the preservation state of the building was uncertain. Since the fall of the Soviet Union in 1991, the library has been restored in a heroic effort led by Finnish architects in conjunction with Russian colleagues and an array of international supporters.

To overcome substantial obstacles caused by decades of inappropriate alterations, lack of financial resources, and inadequate stewardship, the Finnish Committee for the Restoration of Viipuri Library masterfully organized and executed an international campaign that has ensured the survival and revival of Aalto's masterpiece by restoring it to its original design as a municipal library, now known as the Central City Alvar Aalto Library, Vyborg. The committee skillfully negotiated the requisite diplomatic, financial, and technical resources to complete an exemplary and meticulous restoration that reflects the highest standards of scholarship, authenticity, architecture, materials conservation, functionality, social impact, stewardship, and technical imagination.

The conservation of Viipuri Library is a heroic effort that advances the field of modern heritage preservation and demonstrates that it is indeed possible to save the significant modern architectural legacy that remains at risk in Russia as well as in other countries.



ith the selection of the Finnish Committee for the Restoration of Viipuri Library, with the Central City Alvar Aalto Library, the World Monuments Fund/Knoll Modernism Prize continues to bring to the public's attention important works of modern architecture that faced seemingly overwhelming challenges to their survival and the heroic efforts that saved and rejuvenated them.

World Monuments Fund became involved in the efforts to restore Viipuri Library when the building was listed on the World Monuments Watch, first in 2000 and again in 2002. Through the Robert W. Wilson Challenge to Conserve Our Heritage, WMF then made a grant of \$300,000 to restore the 58 signature skylights over the lending and reading halls.

The recognition of the Finnish Committee as the recipient of the 2014 World Monuments Fund/ Knoll Modernism Prize beautifully embodies the mission of the prize, which was created to raise public awareness of the influential role modernism continues to play in our architectural heritage and to demonstrate how these buildings can remain sustainable structures with vital and viable futures.

World Monuments Fund is grateful to Knoll for its support in helping WMF address one of the most pressing issues of historic preservation today.

Bonnie Burnham

President, World Monuments Fund

n the heels of our 75th anniversary celebration, our commitment to pioneering design, workspace research, and sustainability programs is stronger than ever. We are especially proud of our continuous support of the World Monuments Fund's Modernism at Risk Initiative, and we congratulate the Finnish Committee for the Restoration of Viipuri Library and the Central City Alvar Aalto Library team for their exemplary work on Aalto's masterpiece, a modernist cornerstone of our cultural landscape.

Clients come to Knoll for the knowledge and products to create high performance workplaces and elegant modern residences. While many modern sites are being demolished, disfigured, or abandoned, the grit and determination with which the restoration team approached the project, to say nothing of the results achieved, serve as a model for the role that architects and designers can play in the preservation of our architectural legacy.

I would like to thank those who nominated projects for the 2014 prize and salute all those associated with the Viipuri Library for their exemplary work.

> Andrew B. Cogan CEO, Knoll, Inc.





THE FINNISH COMMITTEE FOR THE RESTORATION OF VIIPURI LIBRARY

Eric Adlercreutz, Chairman

Restoration Planning Group: Tapani Mustonen, Maija Kairamo, Leif Englund, Maren Nielsen, Olli Helasvuo, Eero Pekkari, Heikki Pekonen, Ben-Roger Lindberg, Aki Schadewitz, Mariel Pohlman

The Finnish Committee for the Restoration of Viipuri Library was the responsible planner and designer and had an advisory role in the restoration project and supervised, guided, inspected, and documented the restoration. The committee was established in 1992 and included members who had worked in Alvar Aalto's office and who were experienced in restoring Aalto buildings. The Alvar Aalto Foundation supported the work of the committee by providing it with free access to the archives of original drawings, specifications, and photographs for the development of the restoration plans for the library. Upon its establishment, the committee organized Finnish and international campaigns to raise funds and visibility for the restoration. Over one thousand architects from around the world signed an appeal.

THE CENTRAL CITY ALVAR AALTO LIBRARY, VYBORG

Tatiana Svetelnikova, Helen Rogozina, Alexander Batalin

The Central City Alvar Aalto Library was the primary on-site organization that worked with the Finnish Committee to implement the restoration plans and control the quality of the work. The director, former director, and building engineer of the library worked with the Finnish Committee to adapt the plans to local conditions, materials, and techniques.



THE JURY

Barry Bergdoll, Chairman Meyer Schapiro Professor of Art History and Archaeology, Columbia University and Curator of Architecture and Design, The Museum of Modern Art

Jean-Louis Cohen Sheldon H. Solow Professor in the History of Architecture at New York University

Kenneth Frampton Ware Professor of Architecture at Columbia University

Dietrich Neumann Royce Family Professor for the History of Modern Architecture and Urban Studies at Brown University

Susan Macdonald Head of Field Projects at the Getty Conservation Institute

Theo Prudon

President of DOCOMOMO/US, Architect at Prudon & Partners LLP, and Adjunct Associate Professor of Historic Preservation at Columbia University

Karen Stein

Architectural advisor, member of the faculty of the Design Criticism Program at the School of Visual Arts, and Executive Director of the George Nelson Foundation

Restoration of Alvar Aalto's Viipuri Library Bringing the Architecture Back to a Modern Icon

Henry Tzu Ng, Executive Vice President, World Monuments Fund

he remarkable restoration and rejuvenation of Viipuri Library is as storied as its origins, the evolution of its design, and its survival against a backdrop of war, shifting international borders, and abandonment. The 2014 World Monuments Fund/Knoll Modernism Prize salutes the diligence, perseverance, and inventiveness of both the Finnish Committee for the Restoration of Viipuri Library and the Central City Alvar Aalto Library, Vyborg. As noted in the jury citation, the restoration of the library reflects the highest standards of scholarship, authenticity, architecture, materials conservation, functionality, social impact, stewardship, and technical imagination. Its successful completion is also a testament to the passion and sheer force of will that revitalized this icon of modern architecture as a center of community life in Vyborg, Russia.

Portions of this essay are based on the Finnish Committee for the Restoration of Viipuri Library, Alvar Aalto Library in Vyborg: Saving a Modern Masterpiece, Helsinki: Rakennustieto, 2009, and Alvar Aalto Museo, Alvar Aalto Library Viipuri, Helsinki: 2014.



THE BUILDING

In 1927, Aalto entered and won a design competition for a municipal library in what was, at the time, Viipuri, the second largest city in Finland. With its Nordic classicist design, including a frieze with classical figures, and a sunken center hall, the design was compared to the Stockholm Municipal Library by Gunnar Asplund, which was being completed at the time.

Due to requests for alterations from the competition jury, changes in the site plan for the building, and an economic recession, construction of Viipuri was delayed until 1933. An analysis of Aalto's early drawings reveals a significant period of maturation throughout the delays, during which he modified his plans a number of times.

In the end, what emerged was a radical new design that coincided with Aalto's own evolving approach to architecture. The building was completed in 1935, by which point its final form had become a functionalist design with a new personalized modern vocabulary, informed by the architect's contemporaneous designs for the Turun Sanomat Newspaper Building (1929) and the Paimio Sanatorium (1932).

As is the case with all of Aalto's work, the architecture of Viipuri was experimental. He used flat roofs boldly penetrated by numerous skylights (in the lending and reading halls) and a distinctively exuberant undulating wooden ceiling (in the lecture hall) for the first time. Many of Aalto's innovations at Viipuri would appear in his later buildings, including the libraries at Seinäjoki (Finland), Rovaniemi (Finland), Mount Angel (U.S.), the National Pensions Institute (Finland), and the Wolfsburg Cultural Center (Germany). At Viipuri, Aalto created a completely new library system, where patrons could wander freely in response to "an open invitation to read." The architecture of the library symbolized the modern movement's ideals of transparency and equality.

The library has a net floor area of approximately 25,000 square feet, and includes a periodicals reading room, children's library, lecture hall, lending and reading halls, entrance hall, and offices. Aalto, together with his wife Aino and assistant Aarne Ervi, designed everything, including the building, site plan, interior fixtures, furniture, and lights. The result was a work that was utterly new and perfectly integrated.

In 1995, the Alvar Aalto Library was included on the Russian Federation's List of Objects of Historical and Cultural Value.





THE ARCHITECT

Although Alvar Aalto (1898–1976) won the design competition for Viipuri Library when he was not yet 30 years old, it quickly became one of his most important buildings, seminal to the development of his architecture and a fertile reference point for many of his subsequent buildings. Viipuri became an icon of modern architecture almost immediately; along with the Paimio Sanatorium, Viipuri established the young architect's international reputation. *Alvar Aalto: Architecture and Furniture* at the Museum of Modern Art, New York (1938) was a landmark exhibition featuring both buildings. It was the museum's first solo exhibition to focus on a modern architect, and the catalogue was the first book on Aalto.

Aalto, who is today known as much for his furniture, textiles, and glassware as he is for his buildings, continually evolved as an architect and designer. His architecture developed from Nordic classicism to a purist International Style/functionalism and then to a more personal, synthetic, and idiosyncratic form of modernism. In the mid-1930s his work began to embody a more tactile and organic sensibility. Some feel his architecture matured in works executed after World War II.

The four Aalto works in the United States are: Baker House (dormitory), Massachusetts Institute of Technology, Cambridge, Massachusetts (1947– 1948), where Aalto was a visiting professor after WWII; Mount Angel Abbey Library, Mount Angel, Oregon (1970); the Edgar J. Kaufmann Jr., Conference Room at the International Institute of Education, New York (1964); and the poetry reading room at the Lamont Library, Harvard University, Cambridge, Massachusetts (1948) (altered).



The library in the 1940s

DETERIORATION, ABANDONMENT, AND INAPPROPRIATE ALTERATIONS

Shortly after the library was finished, its survival was threatened by war and shifts in the border between Finland and Russia. In 1944, Karelia—the province of Finland in which Viipuri was located— was ceded to the USSR and fell under Soviet control. The library entered what would turn into decades of isolation that resulted in the building, once known around the world, disappearing from worldview. Only after the collapse of the Soviet Union could a clear assessment be undertaken.

Vyborg was badly bombed during World War II, but the library sustained only minor damage. However, the building stood abandoned for nearly ten years after the war, during which time it was left exposed to the elements. By the 1950s, the majority of the library's original inner and outer surfaces, fittings, and furniture were lost or damaged beyond repair.

The extensive damage spurred early attempts at restoration. In the late 1950s and 60s, Soviet architects sought help and materials from Finland. This was impossible given Cold War politics, so with limited funding and no access to the original design documents in Helsinki, most repairs were inappropriate and crudely executed. Proportions and materials used differed from the original: eaves were raised by a height of two bricks and the height of the lecture hall bay window was decreased by 20 centimeters because glass panes of the original size were not available. The lecture hall's famed undulating ceiling was inaccurately reproduced with curved instead of flat slats. In 1962, Aalto reportedly said, "the building exists, but the architecture has gone."

RESTORATION

In 1991, cultural circles in Finland and Russia began a formal cooperation to restore the library to its original design. The Finnish Committee for the Restoration of Viipuri Library was established in 1992 and subsequently executed an impressive international campaign that lasted until 2013 and has ensured the survival and revival of Aalto's masterpiece.

RESTORATION AND CONSERVATION PRINCIPLES

The restoration principle of the committee's project was to return the essential features of Aalto's architecture while taking into account the operational needs of the library, modern building and library technology, security, and energy conservation. The architects also chose to restore certain practical features from the Soviet-era renovations as a historical layer; these include alterations in the entrance lobby, the circulation desk in the reading hall, and the handrail on the staff staircase.

The extensive archives of over 350 sketches and drawings for Viipuri Library, housed at the Alvar Aalto Foundation in Helsinki, were used to set the design standards for the restoration project. Access to the architect's original drawings allowed the committee to reinstate Aalto's vision and return what he felt had been lost from his building.

Surviving original features in the library were conserved, while missing elements were reproduced based on the archival documents. In addition, all inappropriate alterations in the library were reversed. The fact that Aalto had lived on the site for a few weeks during its construction and had made many on-site alterations sometimes required a creative interpretation to reconcile original drawings with as-built conditions and later alterations.

Although the early restoration plans received widespread international attention, progress was extremely slow. Limited and intermittent funding resulted in the project occurring in phases, planned and carried out in order of urgency. By 2010, the roof of the lecture hall and library, as well as the glass facade, some smaller spaces, and structural elements had been saved, yet the majority of the building remained in need of restoration. In December of 2010, the Russian Federation granted the total funds needed to complete the project; this included the main lending and reading halls, the children's library, the book storage in the cellar, the remaining technical systems, and the exterior.

HIGHLIGHTS OF THE RESTORATION

The three most distinctive elements of the library are the glass facade-enclosed staircase, the multi-level sky-lighted lending and reading halls, and the undulating wooden ceiling in the lecture hall. Restoration of all three elements highlights the challenges and inventive solutions employed to restore Aalto's original architectural intent. For most of the 20 years, conservation work was scheduled so as not to interfere with the operations of the library; only in the final two years was the library closed and services provided off-site to complete the restoration work.

















GLASS FACADE

The great glass wall reflects the metamorphosis from Aalto's original classicist competition entry in 1927 to one of the most beautiful examples of his functionalist period. With little initial funding available at the outset of the project, the committee chose to restore the glass facade first, representing a visible and potent symbol of the intent to complete the entire library.

The original steel frame of the glass facade was conserved, as was the original brass hardware; later inappropriate Soviet additions were removed. All metal parts were rust-protected and painted, while wooden parts were oiled.

Surrounding the main entrance, which is adjacent to the glass facade, new soapstone cladding replaced the Sovietera black polished granite. The soapstone was sourced from the same quarry in Juuka, Finland, as the original.

LENDING AND READING HALL SKYLIGHTS

In the lending and reading halls, Aalto designed the skylights to be the main source of natural lighting. Although this use of natural lighting would eventually become a defining characteristic of his work, it was used for the first time at Viipuri.

No direct sunlight enters the rooms. The 58 skylights sit atop deeply-set conical-shaped funnels that bring daylight into the room in the form of thousands of lines of reflected light. This diffuses the light, producing shadowless illumination. It is ideal for the reader in that a book can be read anywhere in the room without glare. Overhead, blue sky and clouds float above each circular opening.

Soviet-era renovations included the installation of plastic domes on the originally flat skylights. The domes obscured the natural light and were removed during restoration. The original roughcast glass skylights were reconstructed, but using modern double-glazed laminated glass to prevent condensation and improve efficiency.

LECTURE HALL

Aalto designed the undulating ceiling as an intricate arrangement of wooden panels with tongue and groove joints. The original ceiling—which was likely installed by boat-building carpenters—was destroyed after World War II, while a well-intentioned but badly executed approximation with curved slats was installed in the 1960s.

During the restoration, the entire interior of the lecture hall, including the Soviet-era replication of the ceiling, was dismantled and restored. A new ceiling was reproduced using Aalto's original models from the 1930s. Not found until 2000, when they were discovered in an unknown storage space during work on Aalto's Helsinki home, the models allowed for a successful reconstruction of the architect's original ceiling. Approximately nine kilometers of pine strips were used to create the curves of the ceiling.



MODERN ENERGY CONSERVATION STANDARDS

Single-pane laminated glass was used in the lecture hall and periodicals reading room, while energyefficient double-glazed laminated glass replaced the original single-pane glass in the children's library. The staircase glass wall and smaller cellar windows, originally double-glazed, were all conserved. The wooden window frames in the caretaker's apartment and in the office corridor were reconstructed according to the original drawings and are double-glazed, while the windows in the offices have energy-efficient double-glazed inner frames and single-glazed outer frames.

INTERNATIONAL COOPERATION

The restoration of the library was a complicated cross-border project, dependent on effective intercultural communication and collaboration, and also subject to functional and economic challenges including customs issues, market fluctuations, and changing currency rates. The Finnish Committee for the Restoration of Viipuri Library controlled the architectural quality of the project, while Russian building contractors and workers carried out the construction.

Financial support was provided by governmental agencies in Finland and Russia, and the International Committee of the Friends of the Viipuri Library, with members in Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, Mexico, Portugal, Russia, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

The restored library was completed and opened to the public on November 23, 2013.

WORLD MONUMENTS FUND is the leading private, non-profit organization dedicated to the preservation of the world's architectural heritage. Since its founding in 1965, World Monuments Fund has worked with local communities and partners at more than 600 sites in over 100 countries. Through fieldwork, advocacy, education, and training, the organization helps preserve important monuments, buildings, and sites around the globe. Headquartered in New York, WMF has offices and affiliates worldwide.

THE WORLD MONUMENTS FUND MODERNISM AT RISK INITIATIVE was launched in 2006 to bring international attention and resources to address the key threats and challenges facing many modern buildings only decades after their design and construction: demolition, inappropriate alteration, perceived obsolescence, and public apathy, as well as the technical problems associated with conserving innovative designs and materials.

THE WORLD MONUMENTS FUND/KNOLL MODERNISM PRIZE was established as part of the larger advocacy mission of the World Monuments Fund Modernism at Risk Initiative to acknowledge the specific and growing threats—neglect, deterioration, and demolition—facing significant modern buildings, and to recognize the architects and designers who help ensure their rejuvenation and long-term survival through new design solutions. The prize is awarded biennially to an individual or firm in recognition of a completed project or a body of work. The award is a \$10,000 honorarium and a limited-edition Knoll Barcelona[®] Chair.

Previous prizes were awarded for the restoration of

2008: ADGB Trade Union School, Bernau, Germany2010: Zonnestraal Sanatorium, Hilversum, The Netherlands2012: Hizuchi Elementary School, Yawatahama City, Ehime Prefecture, Japan

For more information on the previous winners, visit wmf.org/modernism

Knoll is the founding sponsor of the World Monuments Fund Modernism at Risk Initiative and the World Monuments Fund/Knoll Modernism Prize.

PHOTOS: Front cover, pages 3, 5, 7, 9, 16(2), 17, Back cover: Finnish Committee for the Restoration of Viipuri Library/Petri Neuvonen. Page 11, 19: Finnish Committee for the Restoration of Viipuri Library. Page 12: The Alvar Aalto Foundation. Page 13: Regional Archives of the State Museum Vyborg Castle. Page 15(6): Central City Alvar Aalto Library, Vyborg.



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