

Keeping It Modern 2019 Architectural Grants



Villa E-1027. Photo: Manuel Bougot
www.manuelbougot.com 2016

Association de Gestion du Site Cap Moderne *Villa E-1027, Eileen Gray, 1929, Roquebrune-Cap-Martin, France*

Architect and influential modern furniture designer Eileen Gray built Villa E-1027 between 1927 and 1929 on the shoreline of the Côte d'Azur in southern France. Conceived as a retreat and vacation home for Gray and architectural author and editor Jean Badovici, the Villa marries forward-thinking design principles with practical living. Following decades of environmental stress and several private owners, the building now belongs to the French Coastline Conservancy and is under the care of the non-profit Association Cap Moderne that is committed to its preservation.

In 2016, the Getty Foundation awarded a planning grant that supported technical research into Villa E-1027's reinforced concrete. This defining material of the building has suffered serious deterioration from exposure to sea air, rain and water runoff from the coastal slope. Once completed, the work will mark a crucial step forward in the long-term preservation of the Villa in its picturesque but challenging seaside environment.

With thorough research and planning now in place, the building's stewards are preparing to take informed action. A new Getty grant will support conservation of the Villa's reinforced concrete and serve as a pilot for preserving concrete buildings with the use of impressed current cathodic protection or ICCP. Originally developed for sea vessels to prevent metal corrosion in wet conditions, the process runs a regulated flow of low-power electrical current through the metal rebar that reinforces the building's concrete. This protective current stops the chemical reaction that causes corrosion of the rebar. Following completion of the restoration work, the Villa will be part of a public museum managed by the Centre des Monuments Nationaux in France.

Grant support: \$200,000



Side view of Buzludzha Monument. Photo © Dylan Thuras

Deutsches Nationalkomitee von ICOMOS e.V.

Buzludzha Monument, Georgi Stoilov, 1981, Hadzhi Dimitar Peak, Bulgaria

The Buzludzha Monument was built in 1981 to commemorate the ninetieth anniversary of the Bulgarian Socialist movement. Influenced by the Brutalist style that had become popular in Western Europe, Bulgarian architect Georgi Stoilov designed the monument as an expansive disc-shaped body, with a free-standing steel roof and a dramatic tower. A mix of raw

concrete, white marble, colorful interior mosaics, and granite plates adds textural variety to the structure, which can be seen from miles away in its mountain-top location. From 1981 to 1989, the monument was one of the most popular sites in Bulgaria, until it closed with the end of communist rule. Local, regional, and national Bulgarian government representatives have recently expressed support for preserving the monument, and the process for listing the building as a national heritage site has already begun.

A Getty grant will fund a conservation management plan that builds on this momentum in order to preserve the building for future generations. German preservation specialists and local experts will produce a digital Building Information Model (BIM), a robust online platform that incorporates laser scans, archival materials, and more to create a shared knowledge resource for decision-making about the monument. Another critical aspect of the project will be the exploration of viable options for adaptive reuse of the landmark. Throughout the project, the team will lead an awareness campaign to demonstrate that this national heritage monument is a masterpiece of architectural engineering, an integral part of Bulgarian history, and a public site with great potential for continued use with a new function.

Grant support: \$185,000



North Christian Church. Photo: Hadley Fruits

**Heritage Fund of Bartholomew County, Inc.
on behalf of Landmark Columbus**

*North Christian Church, Eero Saarinen, 1964,
Columbus, Indiana*

Designed by Finnish-born American architect Eero Saarinen, the North Christian Church is a National Historic Landmark and a centerpiece of the modernist building campaign in Columbus, Indiana led by J. Irwin Miller's Cummins Foundation Architecture Program. Miller and his wife Xenia Simmons Miller were key patrons in the city and supported much of its iconic mid-century architecture. The North Christian Church stands out in this group with its distinctive hexagonal plan that rises and coalesces into an elongated, needle-like spire.

One of the building's most innovative architectural features is the oculus at the spire's base, which floods the interior with natural light and draws attention to the center of the room where Communion takes place. The church features a cast-in-place concrete ceiling, strategically-placed bands of windows that make the angled roof appear to float, and sumptuous mahogany pews. Notable landscape architect Daniel Urban Kiley designed the surrounding landscape, which accentuates the building's unique profile as an architectural symbol of the city.

With grant support, stewards will develop a conservation management plan to provide the historical context and strategic guidance needed for the church's long-term upkeep. A multifaceted team ranging from designers and engineers to landscape architects will for the first time assess all aspects of the site's condition and create an inventory of past alterations.

The results will be gathered into a detailed social, economic, and cultural study to be jointly adopted by architectural designers, community stakeholders, and church leaders in order to protect North Christian Church as an active and vital presence in the civic life of Columbus.

Grant support: \$150,000



Miller House and Garden. Photo courtesy of Newfields

Indianapolis Museum of Art Inc.

Miller House and Garden, Eero Saarinen, 1953, Columbus, Indiana

Like the North Christian Church, the Miller House and Garden in Columbus, Indiana was designed by Eero Saarinen, with landscape design by Daniel Urban Kiley, through a commission by J. Irwin and Xenia Simmons Miller. Constructed as a year-round residence for these architecture enthusiasts, the mid-century modern structure features an open layout, glass and steel walls, and blocks of gridded skylights. Although the home was donated to the Indianapolis Museum of Art in 2009 and is publicly

accessible through tours, the site faces a growing list of conservation challenges. Among them are roofing complications caused by the skylight system, surface damage and leaking throughout the house, and maintenance of signature landscape elements.

This wide-ranging inventory of problems calls for an overarching plan to prioritize and address current and future conservation challenges. The Indianapolis Museum of Art will work with expert consultants assembled by PennPraxis, a group from the University of Pennsylvania, to identify the most critical building systems and materials issues and establish protocols for assessment, monitoring, and conservation treatment. The work at the Miller House, as well as at the North Christian Church as described above, will pave the way for policy-based conservation planning in a city that boasts more than seventy buildings by such renowned architects as I. M. Pei, Cesar Pelli, and Robert Venturi.

Grant Support: \$170,000



Laboratory for Faculty of Chemical Technology at Kaunas University of Technology. Photo: Lukas Mykolaitis

Kaunas University of Technology

Laboratory for Faculty of Chemical Technology at Kaunas University of Technology, Vytautas Landsbergis-Žemkalnis, 1935, Kaunas, Lithuania

With its open floor plan, long spans of continuous windows, flat roof, and reinforced concrete frame, the Laboratory for Faculty of Chemical Technology at Kaunas University of Technology is an exceptional example of Lithuania's unique regional contribution to Modern Movement architecture during the period between the two world wars. Originally built as the Military Research Laboratory for the Lithuanian Ministry of National Defense by

architect Vytautas Landsbergis-Žemkalnis and engineer Anatolijus Rozenbliumas, the building was part of a major construction boom and push for modernization following the Republic of Lithuania's declaration of independence in 1918 and the designation of Kaunas as its capital city. Although the exterior of the building needs restoration, the laboratory spaces have retained their authentic character. Inside, the original stair railings, elevators, light fixtures, laboratory equipment, and furniture all remain intact. As Kaunas prepares to be the European Capital of Culture in 2022, there is an opportunity to focus preservation efforts on the city's significant modernist heritage.

With grant support, the Institute of Architecture and Construction at Kaunas University of Technology will partner with local government officials in an effort to protect the building's historic features and ensure its continued use. This includes researching the original construction materials and historic documents to create a conservation management plan for the laboratory. The team will also organize an international workshop in cooperation with the Baltic Region Heritage Committee. The project is expected to serve as a case study for the preservation of other modernist structures in a region with a large amount of 20th-century architecture.

Grant support: €130,000



Uganda National Museum. Photo: Eppich, 2018

Ministry of Tourism, Wildlife, and Antiquities of the Republic of Uganda

Uganda National Museum, Ernst May, 1954, Kampala, Uganda

Ernst May, a German-born pioneer of urban planning who worked in Africa for two decades after being forced into exile when the Nazis seized power, developed the design of the Uganda National Museum as part of a larger expansion plan for the fast-growing capital city of Kampala. As the first modern building in Uganda and one of the earliest cast-in-

place concrete structures in Kampala, the museum influenced the design of other government and institutional buildings throughout the country. While May included elements of International Style modernism for the museum such as flat roofing sections, horizontal rows of windows, a cantilevered entry canopy, and polished concrete floors, he also demonstrated a sensitivity to the local environment by adding perforated partitions for cooling airflow and angled walls that produce diffuse interior lighting.

Sixty-five years after it was built, the museum remains a popular landmark for international tourists and local residents and survives today as the last intact work of May's sizeable oeuvre in the country. However real estate development pressures and the lack of national heritage protection laws mean the museum—and other historic buildings—face mounting threats. Over time the structure has also suffered from cracks in the concrete frame and moisture infiltration due to ground water below the foundation. To address these and other issues, Getty-funded experts will prepare a conservation management plan that includes investigations into the original construction materials and the current structural safety of the building.

Grant support: \$135,000



Torino Esposizioni, Hall B (1948), present state. Photo courtesy Fabio Oggero and PLN Project

Politecnico di Torino

Torino Esposizioni, Pier Luigi Nervi, 1948-1954, Torino, Italy

Pier Luigi Nervi was a prolific engineer and architect who pushed the boundaries of reinforced concrete with daring innovations and expressive concepts. The construction of Torino Esposizioni Exhibition Halls offered Nervi the first large-scale opportunity to combine prefabricated construction elements with his pioneering innovations in ferrocement, concrete reinforced with thin, multiple layers of wire mesh resulting in material that is both flexible and structurally sound. Shaped like a modern cathedral, Hall

B consists of a wide nave covered by a cylindrical barrel vault spanning over 300 feet and of an apse capped by a ribbed, half-dome inset with ferrocement tiles. This stylish and functional combination of precast and pour-in-place concrete elements is repeated in Hall C. Originally designed to host Italy's annual automobile show, Torino Esposizioni has been used for various exhibitions and events, including the 2006 Winter Olympics. Today, however, the complex is mostly abandoned.

With new interest in the preservation of modern buildings in Italy and the recent listing of Nervi's Stadio Flaminio (a 2017 Keeping It Modern grantee), there is growing enthusiasm to rehabilitate this iconic public space. With the support of local government officials, the Politecnico di Torino will use Getty funds to lead multidisciplinary research groups in the completion of a seismic assessment to ensure compliance with recently updated Italian building codes. Also included in the project are non-invasive structural testing, 3D modeling, and the collection and analysis of historic and archival documentation. The project team will synthesize the results into a conservation management plan that merges structural requirements and conservation standards with clear guidelines for the city to prepare the structure for new use.

Grant support: €165,000



Escuela Superior de Comercio Manuel Belgrano, Universidad Nacional de Córdoba, Argentina. Central space and ramps. Photo © Fabio Grementieri

Universidad Nacional de Córdoba

Escuela Superior de Comercio Manuel Belgrano, Osvaldo Bidinost, Jorge Chute, José Gassó, Mabel Lapacó and Martín Meyer, 1968, Córdoba, Argentina

One of the finest examples of Brutalist architecture in Argentina, the Escuela Superior de Comercio Manuel Belgrano was commissioned by the Universidad Nacional de Córdoba through a national design competition in 1959. The selected architects—Osvaldo Bidinost, José Gassó, Mabel Lapacó, Jorge Chute and Martín Meyer—completed the impressive structure in 1968. Situated on the banks of the Suquia River in the historic quarter of

Barrio Clínicas, the school is built with a combination of exposed reinforced concrete and local stone, and features a sloped "floating" roof evocative of Le Corbusier's designs for the Chandigarh Capitol Complex in India. Central to the design is a vast covered patio space that is punctuated by towering columns and a prominent, open ramp system that flows between floors.

Although the complex has been designated a Municipal Landmark of the City of Córdoba and a National Historic Monument, it has suffered for decades from increases in the student population, earthquake damage, and ad hoc building interventions. To address these issues strategically, experts from the Comisión Nacional de Monumentos de Argentina and the Universidad Nacional de Córdoba will develop a comprehensive study that assesses the

current state of the building and provides technical specifications for future conservation efforts. Once they complete the study, team members will share the results in seminars and workshops throughout Argentina and Latin America, where exposed concrete has been a prevalent building material. The project will serve as a case study for graduate students at the University and will be publicized through a technical publication, exhibition, and documentary film.

Grant support: \$150,000



Beira Railway Station, view from Caminhos de Ferro Square. Photo © Elisiário Miranda

Universidade do Minho

Beira Railway Station, Francisco José de Castro, João Garizo do Carmo, Paulo de Melo Sampaio, 1965, Beira, Mozambique

Upon its completion in 1965, the Beira Railway Station became a critical component of Mozambique's railway system, connecting the neighboring country of Zimbabwe to the coast. The complex juxtaposes a gracefully-arched vaulted atrium with a rectangular administrative building and was designed by three local architects: Francisco José de Castro, João Garizo do Carmo, and Paulo de Melo Sampaio. This trio expressed the bold ideals of post-war modern

architecture through the station's open floor plan, brise soleil (sunshades), and pilotis (reinforced concrete stilts). Modernist glass mosaic panels by local ceramicist Jorge Garizo do Carmo and abstract sculptures by Maria Alice Mealha add to the building's significance as a symbol of progress. Although still in use today, the station's train traffic has decreased dramatically, thus opening up the opportunity to re-envision the purpose of the complex.

A team based at the Universidade do Minho in Portugal will collaborate with local architects and engineers from the national authority of ports and railroads to prepare a comprehensive conservation plan that will suggest possible alternative uses for the train station. The team will compile historic drawings, photographs, and oral histories and also conduct deterioration and damage mapping, which is especially urgent following the recent Cyclone Idai. The resulting plan will help the building owners maintain and improve the site's present uses while adding new functionality to the complex that is also in compliance with current building codes.

Grant support: €160,000



Paraninfo at the Universidad Laboral de Cheste, front view, historical image. Photo: private archive of Carmen Jordá. Donation of Fernando Moreno Barberá. Edited by Ximo Michavila

Universitat Politècnica de València

Paraninfo de la Universidad Laboral de Cheste, Fernando Moreno Barberá, 1969, Cheste, Spain

Designed by the Spanish architect Fernando Moreno Barberá, the Universidad Laboral de Cheste was constructed under the rule of Francisco Franco and was one of several universities meant to provide educational and vocational training for workers' children. Built on a large hillside, the campus layout responds to the contours of the surrounding landscape and includes sports facilities, dorm rooms, classrooms, and art studios. The school's Paraninfo, or auditorium, has become an

architectural symbol for the University, with its bold geometry, enormous volume, and prominent structural ribs. Although the architectural significance of the Paraninfo is recognized by the Spanish Ministry of Culture, it is currently not protected by any legal measures. This has precipitated ad hoc alterations to the architecture. Further complicating matters, failures of the building's experimental materials and other maintenance challenges over time have forced public closure of the auditorium due to safety concerns.

To raise awareness of the cultural significance of the Paraninfo and to find a new use for the building, a professional project team led by Universitat Politècnica de València faculty will engage with the school community. Preliminary studies will range from acoustic testing to energy and sustainability audits. The resulting conservation plan will help stewards identify and protect the building's original elements and meet the necessary legal requirements to reopen the emblematic structure with a new purpose.

Grant support: €170,000