BILL ANDERSON, American, 1923-1971 Portrait of Albert Frey. 1957 gelatin silver print Gift of Mrs. Dorothy M. Anderson

IWAN BAAN, Dutch, born 1975
Frey House II (Palm Springs, California, 1963-64/72)
Interior view with morning light. 2016
Architect Albert Frey
archival inkjet print
Courtesy of Iwan Baan

IWAN BAAN, Dutch, born 1975
Frey House II (Palm Springs, California, 1963-64/72)
View from the north at twilight. 2016
Architect Albert Frey
archival inkjet print
Courtesy of Iwan Baan

Aluminaire House (1931). 2017

Physical model and digital fly-through rendering

Architects A. Lawrence Kocher and Albert Frey

mixed media

Courtesy of California State Polytechnic University, Pomona

CalPoly architecture student fabricators: Roland Argomaniz, Maryanne Ruiz Bartolome, Juan Luis Ibarra, Alyssa Kinney, \*Kyle Ng, Clenel Williams, Christina Younger

\* indicates students who worked on the digital fly-through renderings

Frey House II (Palm Springs, CA, 1963-64/72). 2017 Physical model and digital fly-through rendering Architect Albert Frey mixed media

Courtesy of California State Polytechnic University, Pomona

CalPoly architecture student fabricators: Brenda Marlene Alonso, Manuel De Jesus Araujo Zavala, \*Neal A AuBuchon, Stephanie Quibin Cortes, Prianka Kuttappa, \*Nathan M Spencer, \*Matthew Austin Mace \* indicates students who worked on the digital fly-through renderings

## ALBERT FREY

Albert Frey: Modern Architect

Exhibition tour and interview with Albert Frey and Culver Nichols at Palm Springs Desert Museum, January 3, 1993 video transfer to digital video disk (DVD)

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

Aluminaire House (1931)

Axonometric drawing showing interior. ca. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation

This axonometric drawing allows the viewer to see the full floor plan in three dimensions without the distortion of perspective. Each room is seen in its full dimension.

#### ALBERT FREY

Aluminaire House (1931)

Conceptual sketch of exercise room and bathroom. ca. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation

In this compact house, Frey designed an exercise room adjacent to the bathroom. Privacy is provided by a folding screen on tracks that can be fully open when it is not in use.

#### ALBERT FREY

Aluminaire House (1931)

Conceptual sketch of kitchen. ca. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil and pastel on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation

The Aluminaire House was also called "A House for Contemporary Life" and one of the sponsors was the Aluminum Company of America. The kitchen and utility area on the ground floor featured aluminum walls. The face of the dumb waiter is indicated at the rear. This drawing also includes a sketch of the ground floor entrance hall.

### ALBERT FREY

Aluminaire House (1931)

Elevation and Plan of Mirror. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation

Frey drew detailed drawings of the interior, including built-in furniture, cabinetry, and in this case, the mirror for the bathroom. Seen in elevation and plan, the specifics of the mirror's dimensions and the materials are noted.

## **ALBERT FREY**

Aluminaire House (1931)

Inflatable Seating Based on Rubber Toys & Pads. 1931

Architects A. Lawrence Kocher and Albert Frey

graphite on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

Aluminaire House (1931)

Perspective sketch of exterior. ca. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation Using blue colored pencil to denote the walls of glass, this perspective sketch presents the two main facades of the house and shows its three-story volume. Kocher and Frey's design for the house celebrated new technology in the modern idiom.

#### ALBERT FREY

Aluminaire House (1931)

Perspective sketch of living room. ca. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation This drawing of the living room, a seventeen-foot-high, two-story space, indicates how the narrow space included a shaft for the dumb waiter. Each surface material is described in a different color.

#### ALBERT FREY

Aluminaire House (1931)

Perspective sketch of roof deck, ca. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation

Frey's use of cross-hatching in this drawing allows viewers to see his understanding of how light and shadow would fall on this narrow but important exterior space. Frey specified that the interior of the parapet wall would be lined with asbestos cement board and the floor with asbestos tile.

#### ALBERT FREY

Aluminaire House (1931)

Sketch of roof deck, ca. 1930

Architects A. Lawrence Kocher and Albert Frey

pencil and pastel on paper

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation

The roof terrace on the top floor provided an outdoor seating space. The folding dining table and dumb waiter allowed for dining al fresco. The sketch on the left shows the exercise room, as viewed from above, with its folding door closed.

## **ALBERT FREY**

Aluminaire House (1931)

View of front entrance and double-height living room windows, 1931

Architects A. Lawrence Kocher and Albert Frey

gelatin silver print

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

Cree House II (Cathedral City, California, 1955-56), ca. 1955

Architects John Porter Clark, Albert Frey, and Robson Chambers

graphite on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

Sited on a steep hillside lot, the rectangular volume of the Cree House and its broad, north-facing deck is perched on pilotis. The stone fireplace anchors the house and provides a contrast to the rest of the structure, which is constructed of industrial materials. This house offers a preview to Frey's own Frey House II constructed eight years later.

## **ALBERT FREY**

Frey House I (Palm Springs, California, 1940-41/53)

Section with hanging staircase. ca. 1952

ink and colored pencil on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

Frey added a second story to his original house, adding an upstairs bedroom with round windows framed by sunshades. The staircase and the dining table, both suspended on cables, feature the same aluminum rods, which gives the house a futuristic look.

#### **ALBERT FREY**

Frey House II (Palm Springs, California, 1963-64/72)

AF House No. 2 Bedroom Add'n . ca. 1972

graphite on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

Frey House II (Palm Springs, CA, 1963-64/72)

East section, 1963

graphite and ink on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

In this sectional drawing, the supporting wall, delineated in a heavy line, clearly shows the position of the pool on the upper level and the carport underneath. The house itself is perched at the top of the lot with its shed roof shading the glass.

#### ALBERT FREY

Frey House II (Palm Springs, CA, 1963-64/72)

Elevations and details, 1963

graphite and colored pencil on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

Frey House II (Palm Springs, CA, 1963-64/72)

Floor plan. 1963

graphite and ink on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

Frey designed his compact, 800-square-foot home on a steep hillside lot, and the plan indicates the twelve steps from the driveway and the steps within the house to accommodate the elevation changes. The ovoid shape of the large boulder is echoed in the shape of the pool.

#### ALBERT FREY

Frey House II (Palm Springs, California, 1963-64/72)

Preliminary Site and Floor Plans, Elevations. 1963

ink on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

## **ALBERT FREY**

Frey House I (Palm Springs, California, 1941-42/53), light and color study, ca. 1955; construction of Frey House II (Palm Springs, California, 1963-64/72). 1963-64

8mm transfer to digital video disc (DVD)

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

In Search of a Living Architecture (New York: Architectural Book Publishing Company, Inc., 1939) spiral-bound soft cover edition

Palm Springs Art Museum purchase

## ALBERT FREY

Bent tube chair

repurposed by Albert Frey. ca. 1964

aluminum and rope

Albert Frey Collection, Palm Springs Art Museum

#### ALBERT FREY

Multi-purpose table. ca. 1942

wood

Courtesy of Brad Dunning

## ALBERT FREY

Perspective drawings for In Search of a Living Architecture (1939). n.d.

ink on tracing paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### **ALBERT FREY**

Perspective drawings for In Search of a Living Architecture (1939). n.d.

ink on tracing paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

Perspective drawings for In Search of a Living Architecture (1939). n.d.

ink on tracing paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

#### ALBERT FREY

Personal photo album

Page from Albert's personal photo journal documenting his visit to the West Coast. 1934-36

gelatin silver print snapshot mounted on paper

Albert Frey Collection, Palm Springs Art Museum

#### ALBERT FREY

Personal photo album

Page from Albert's personal photo journal documenting his interest in the modern steel electrical towers in the Mohave Desert. 1942

gelatin silver print snapshot mounted on paper

Albert Frey Collection, Palm Springs Art Museum

### **ALBERT FREY**

Personal photo album

Page from Albert's personal photo journal documenting his visit to the Hoover Dam. 1936

gelatin silver print snapshot mounted on paper

Albert Frey Collection, Palm Springs Art Museum

#### ALBERT FREY

Personal photo album

Page from Albert's personal photo journal documenting his interest in vernacular building types during his travel across the United States. 1932

gelatin silver print snapshot mounted on paper

Albert Frey Collection, Palm Springs Art Museum

When Frey traveled either in Europe or in the United States, he photographed architectural sites, building details, engineering feats, and remarkable landscapes, which he collected in numerous photo albums. These photographs give us a clear indication of what particularly interested him.

#### **ALBERT FREY**

Service Station for Culver Nichols (Tramway Gas Station, Palm Springs, CA, 1965)

Perspective drawing, 1965

Architects Albert Frey and Robson Chambers

graphite and colored pencil on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

This distinctive building's huge roof span, a hyperbolic paraboloid, echoes the slope of the nearby mountain. Situated at the entrance to Palm Springs, the Tramway Gas Station continues to be an architectural beacon. Although somewhat altered over time, it retains its essential features and currently serves as the Palm Springs Visitor Center.

ALBERT FREY

Solar chart, 1936

Architects John Porter Clark and Albert Frey

ink on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

While John Porter Clark and Albert Frey worked together in 1935-36, they conducted a year-long solar study, raising a ten-foot pole to document the angle of the sun. The chart they created enabled them to calculate the depth of the overhang that was needed to protect the glass in summer and to allow the sun to enter in winter.

FRANÇOIS HALARD, French, born 1961

Frey House II (Palm Springs, California, 1963-64/72)

View from the southeast, 1995

Architect Albert Frey

archival pigment print from negative, edition of 7

Gift of L.J. Cella

FRANÇOIS HALARD, French, born 1961

Frey House II (Palm Springs, California, 1963-64/72)

View from the southwest. 1995

Architect Albert Frey

archival pigment print from negative, edition of 7

Gift of L.J. Cella

F. S. LINCOLN, American, 1894 – 1976

Kocher Canvas Weekend House (Northport, New York, 1934)

Exterior view with Albert on roof deck. ca. 1935

Architects A. Lawrence Kocher and Albert Frey

gelatin silver print

Courtesy of Special Collections, John D. Rockefeller Jr. Library, The Colonial Williamsburg Foundation

This house continued Kocher and Frey's experiments in prefab construction. A canvas-and-steel structure raised on six pilotis, the second floor was accessed by a spiral staircase. Frey is standing against the railing on the flat roof.

FRANK HAMERSCHLAG, C. E., American

Frey House II (Palm Springs, California, 1963-64/72)

Site Survey for Albert Frey [showing revised lot lines]. 1963

Architect Albert Frey

graphite on paper

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

### MICHAEL SCHWARTING, American

Aluminaire House (1931), on location at Central Islip Campus, New York Institute of Technology, New York, New

York. ca. 1990

archival inkiet print

Courtesy of Michael Schwarting

### SHELL OIL COMPANY

1932 United States Official Road Map with notations by Albert Frey. 1932

offset lithograph

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

For two months in 1932 and again in 1934, Albert Frey drove across the United States in his convertible Model A Ford. On this map he documented his routes showing the cities, national parks, and Native American pueblos he visited on each journey.

JULIUS SHULMAN, American, 1910-2009

Aerial Tramway Valley Station (Palm Springs, California, 1964)

View from the east, 1964

Architects John Porter Clark and Albert Frey

black and white digital lightjet print

Palm Springs Art Museum purchase

#### JULIUS SHULMAN

Frey House I (Palm Springs, California, 1940-41/53)

Albert with his Austin Healey convertible. 1956

Architect Albert Frey

black and white digital lightjet print

Palm Springs Art Museum purchase

## JULIUS SHULMAN

Frey House I (Palm Springs, California, 1940-41/53)

Interior with hanging table. 1953

Architect Albert Frey

color digital lightjet print

Palm Springs Art Museum purchase

#### JULIUS SHULMAN

Frey House II (Palm Springs, California, 1963-64/72)

View of dining/drafting table. 1965

Architect Albert Frey

color photograph

Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

## JULIUS SHULMAN

Frey House I (Palm Springs, California, 1940-41/53)

View of main living area. ca. 1954

color photographic print

Albert Frey Papers, Art, Design, and Architecture Museum, UC Santa Barbara

Albert Frey commissioned photographs of both the Frey House I and Frey House II from Julius Shulman, who is often recognized as the first architectural photographer to capture the experience of buildings as spaces for living. He frequently incorporated people or signs of potential activity into his images. Frey found in Shulman a photographer who appreciated the seamless way he integrated industrial materials and the natural landscape with close attention to the environmental conditions of the desert.

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## JULIUS SHULMAN

Frey House II (Palm Springs, California, 1963-64/72)

View of dining/drafting table. 1965

Frey House I (Palm Springs, California, 1940-41/53)

View of main living area. ca. 1954

## Architect Albert Frey

color photographs, Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

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## JULIUS SHULMAN, American, 1910-2009

Frey House II (Palm Springs, California, 1963-64/72)

Aerial view from the west [before 1972 addition]. 1965

Architect Albert Frey

black and white digital lightjet print

Palm Springs Art Museum purchase

## JULIUS SHULMAN

Frey House II (Palm Springs, California, 1963-64/72)

View from the north. 1965

Architect Albert Frey

black and white digital lightjet print

Palm Springs Art Museum purchase

#### JULIUS SHULMAN

Frey House II (Palm Springs, California, 1963-64/72)

View from the southeast corner. 1964

Architect Albert Frey

gelatin silver print mounted on foam board

Palm Springs Art Museum purchase with funds derived from a previous gift from Mr. and Mrs. R. H. Hallett

### JULIUS SHULMAN

Frey House II (Palm Springs, California, 1963-64/72)

View from the southwest [before 1972 addition]. 1965

Architect Albert Frey

black and white digital lightjet print

Palm Springs Art Museum purchase

### JULIUS SHULMAN

Palm Springs City Hall (Palm Springs, California, 1952)

Brise soleil. 1958

Architects Williams, Williams, & Clark, Frey, Chambers

black and white digital lightjet print

Palm Springs Art Museum purchase

### STEPHEN H. WILLARD, American, 1904-1965

Kocher-Samson Building (Palm Springs, California, 1934)

View from the north. 1935

Architects A. Lawrence Kocher and Albert Frey

gelatin silver print

Albert Frey Collection, Palm Springs Art Museum

#### STEPHEN H. WILLARD

Kocher-Samson Building (Palm Springs, California, 1934)

View of exterior staircase. ca. 1934

Architects A. Lawrence Kocher and Albert Frey

gelatin silver print

Albert Frey Collection, Palm Springs Art Museum

## STEPHEN H. WILLARD

Kocher-Samson Building (Palm Springs, California, 1934)

Interior view of upstairs apartment. ca. 1935

Architects A. Lawrence Kocher and Albert Frey

gelatin silver print

Albert Frey Collection, Palm Springs Art Museum

FRANCISCO ALBUQUERQUE, Brazilian, 1917-2000 Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952) Lina Bo Bardi at living room windows. 1952 gelatin silver print Courtesy of Instituto Lina Bo e P. M. Bardi

At the age of 36, Bo Bardi became the celebrated author of the house she designed for herself and her husband P. M. Bardi in the Morumbi subdivision of São Paulo. Her use of glass was innovative for residential design in the city, creating a panoramic view that integrated architecture and the surrounding landscape.

FRANCISCO ALBUQUERQUE, Brazilian, 1917-2000 Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952) Lina Bo Bardi on entrance stairway. 1952 gelatin silver print Courtesy of Instituto Lina Bo e P. M. Bardi

The Bardi House was the first house to be completed in the Morumbi subdivision and proposed a new form of modern living in São Paulo. Bo Bardi's iconic photograph, which depicts her standing at the house's entry stairway, reconciles her interest in the picturesque elegance of simple things and the sublime presence of an artificial shelter in nature.

OSWALDO BRATKE, Brazilian, 1907-1997 GREGORI WARCHAVCHIK Brazilian, born Ukraine, 1896-1972 Jardim Morumby [Green hills gardens] Subdivision plan (São Paulo, Brazil). ca. 1949 Client Banco Nacional Imobiliário S. A. ballpoint, graphite, and print on offset paper Courtesy of Instituto Lina Bo e P. M. Bardi

The exclusive Morumbi subdivision, site to both the Bardi and the Cirell houses, was conceived by Bratke and Warchavchik emulating the ideals of post-World-War-II suburban living in Southern California. The project proposed an integration of large, modernist single residences into steep and leafy lots, while also promoting car culture.

LINA BO BARDI, Brazilian, born Italy, 1914-1992 Bardi "Cuddle" Bowl Chair. 1951/2011 painted tubular metal and leather Courtesy of Arper

Bo Bardi's Bowl Chair (originally in English) is the most iconic among the chairs she designed following her twoyear partnership with architect Giancarlo Palanti in the furniture design studio Paubrá. Conceived in two parts, this chair allows for great flexibility of use and composition. She imagined the moveable seat to take different positions and to be finished in different colors and materials. The chair is today produced by Arper in a limited edition of 500 pieces in partnership with the Instituto Lina Bo e P. M. Bardi in São Paulo.

### LINA BO BARDI

Bardi "Cuddle" Bowl Chair concept sketches. 1951 graphite, china ink, and crayon on offset paper Courtesy of Instituto Lina Bo e P. M. Bardi

While studying her Bowl Chair, Bo Bardi imagined alternatives according to the use of different seats. This thought process followed the experience of her partnership with architect Giancarlo Palanti in the furniture design studio Paubrá, in which they explored traditional and industrial materials ranging from canvas to rope and from wood to metal.

#### LINA BO BARDI

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952),

*Initial perspective studies for interior.* ca. 1949 china ink on offset paper

Conceptual study for interior with Lina Bo and P. M. Bardi in the foreground. ca. 1949 colored pencil and china ink on offset paper Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi produced this series of interior perspective sketches while studying the project for her house in São Paulo. They reveal both her search for open and uncluttered living spaces integrated with the surrounding landscape and her keen drawing skill in representing architecture with simple elements.

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#### LINA BO BARDI

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952), Elevation and perspective studies for terraced gardens. 1951 ballpoint, hydrographic, and graphite on offset paper Courtesy of Instituto Lina Bo e P. M. Bardi

In an effort to integrate architecture with natural elements, Bo Bardi imagined creating terraces for hanging gardens on the steep site around her house. Though never executed, this project was followed by intensive planting of foliage and trees over the years and, later in life, the creation of small meandering paths and retaining walls covered with pebbles.

### LINA BO BARDI

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952) Preliminary concept sketch. ca. 1948 graphite on offset paper Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi originally conceived her house in Morumbi as a hybrid structure, integrating a rationalist, gridded layout with natural materials. She replaced the initial wood frame sitting on rocks with a concrete and metal frame to conform with the expectations for a modernist house. She used that original structural logic in the Cirell House, designed a few years later.

#### LINA BO BARDI

Bola de Latão (Brass ball) "Throne" Chair. ca. 1987 painted tubular metal, hand-stitched leather, and brass Collection of Deborah Irmas

Bo Bardi designed unique throne chairs for her house with a sardonic commentary in mind. More than once she expressed her preference for individual chairs and dislike of couches, saying that they belonged in a reactionary bourgeois interior. Her reference to thrones relates to a chair exhibition she curated for MASP in 1948, featuring the unassuming dignity of a simple person sitting on a rock.

#### LINA BO BARDI

Cirell House (São Paulo, Brazil, 1957-1958)
Conceptual plan and perspective. ca. 1957
watercolor, graphite, colored pencil, and dry pastel on parchment paper
Courtesy of Instituto Lina Bo e P. M. Bardi

The Cirell House, designed about three blocks from the Bardi House, represented a turning point in Bo Bardi's search for the integration between architecture and nature. This initial sketch shows a gridded and solid volume organized around a fireplace and covered with plants and pebbles, merging influences from Frank Lloyd Wright's and Antoni Gaudi's projects.

#### LINA BO BARDI

Cirell House (São Paulo, Brazil, 1957-1958) Preliminary study for circular staircase. ca. 1957 china ink on offset paper Courtesy of Instituto Lina Bo e P. M. Bardi

Staircases occupied a prominent physical and conceptual place in Bo Bardi's projects. To her, they had important technical and poetic significance in the search for a living architecture. The Cirell House staircase is an example of the simultaneous expression of craft and artistic skills, as well as a privileged theatrical prop for the performance of everyday life.

#### LINA BO BARDI

Cirell House (São Paulo, Brazil, 1957-1958) Ground-floor plan, frontal elevation, and details. 1958 graphite and china ink on tracing paper Courtesy of Instituto Lina Bo e P. M. Bardi

Interested in Antoni Gaudí's and Frank Lloyd Wright's works, in rural architecture, and in the simplification of construction processes, Bo Bardi grounded the Cirell House on its site and surrounded it with naturalistic elements. Instead of glass, she opted for bearing walls surrounded with porches in wood and thatch, recovering her original structural idea for the Bardi house.

### LINA BO BARDI

Cirell House (São Paulo, Brazil, 1957-1958)

Preliminary plan and elevation. ca. 1957

graphite, colored pencil, and china ink on parchment paper
Courtesy of Instituto Lina Bo e P. M. Bardi

In the process of developing the project for the Cirell House, Bo Bardi experimented with the creation of porches around the idea of a single, solid block. This decision culminated in the final project, in which porches create transitional areas that visually open the house to the surrounding landscape without having to use glass.

#### LINA BO BARDI

Conceptual study for a low-cost housing development with perspective views of an individual unit. 1951 watercolor, hydrographic, and china ink on cardstock Courtesy of Instituto Lina Bo e P. M. Bardi

While developing the project for her house in Morumbi, Bo Bardi conceived of a few studies for low-income housing. Influenced by European rationalist ideas, this hypothetical subdivision shows her concern with a range of scales and her interest in simple layouts, industrial building technology, as well as Le Corbusier's and Mies van der Rohe's architecture.

#### LINA BO BARDI

Conceptual study for a low-cost house. ca. 1950 graphite on parchment paper Courtesy of Instituto Lina Bo e P. M. Bardi

This study for a low-income house, conceived during the design of the Bardi house, shows Bo Bardi's early experimentation with rationalist design and industrial materials, which she progressively abandoned after the late 1950s and especially in her mature years. This project highlights her recurrent use of glazed structures and folded roofs.

#### LINA BO BARDI

Conceptual study for a low-cost house. ca. 1950 graphite, colored pencil, and china ink on tracing paper Courtesy of Instituto Lina Bo e P. M. Bardi

This conceptual study for a low-income house announces Bo Bardi's early search for merging European rationalist ideas of minimal existence with simple Brazilian construction techniques and her fascination with lush vegetation, which materialized in her later architectural projects.

#### LINA BO BARDI

Drawing for Domus 192 (December 1943) based on illustrations from Albert Frey's In Search of a Living Architecture (1939)

Perspective solids. ca. 1943
gouache, graphite, and colored pencil on tracing paper

Courtesy of Instituto Lina Bo e P. M. Bardi

Lina Bo Bardi produced a pullout folio for the December 1943 issue of *Domus*, translating Albert Frey's *In Search of a Living Architecture* into Italian and replacing his illustrations with her own drawings.

### LINA BO BARDI

Drawings for Domus 192 (December 1943) based on illustrations from Albert Frey's In Search of a Living Architecture (1939)

Perspective. ca. 1943 Elevation and perspective. ca. 1943

gouache, graphite, and colored pencil on tracing paper Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi produced this series of gouache drawings based on Frey's illustrations for his book, which she and Pagani translated into Italian and published in *Domus* magazine in 1944. Such practice of appropriation was common among Italian editors during the war, given their limited access to resources, travel, and original reportage.

#### LINA BO BARDI

Figueiredo Ferraz House (São Paulo, Brazil, 1962) [unrealized]

Conceptual perspective study of house on boulder. ca. 1962 Section study of house on boulder. ca. 1962

graphite and china ink on parchment paper Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi conceived this unrealized house project for engineer Figueiredo Ferraz, who collaborated in the design of MASP (Museum of Art, São Paulo). The project combines elements of both the Bardi and Cirell houses, such as a simple glazed volume, daring structural features, and naturalistic elements. Her unrelated reference to a boulder—while Frey was simultaneously designing his second house—is unrelated but uncanny.

#### LINA BO BARDI

Frei Egidio Chair. ca. 1987

wood

Courtesy of Zeuler R. Lima

This foldable chair, designed for the Gregório de Matos theater in Salvador, Bahia, is based on X-shaped, foldable, Tuscan chairs from the late-15<sup>th</sup> century CE. Bo Bardi and her assistants were inspired by original pieces she and P. M. Bardi owned and used daily as part of the dinner table set.

#### LINA BO BARDI

La Torraccia, Cirell House guesthouse (São Paulo, Brazil, 1964) Initial plan and elevations. 1964 watercolor, graphite, and china ink on parchment paper Courtesy of Instituto Lina Bo e P. M. Bardi

A few years after the Cirell House was completed, its owners bought the lot next door and commissioned Bo Bardi to design a guesthouse. Inspired by Frank Lloyd Wright's Jacobs House 2 layout, this cylindrical house follows the principles used in the main house, with services around the main living space and the appearance of a rustic building covered with pebbles and plants.

#### LINA BO BARDI

Lina self-portrait. 1933 watercolor and graphite on cardstock Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi produced this rare self-portrait at the age of 19, during her last year at the Liceo Artistico in Rome before entering architecture school. Like some of the photographs of her youth, this watercolor suggests her studied posing and the anti-conventional character she would reveal throughout her career and life.

#### LINA BO BARDI

Lina at Isola del Giglio (Italy). ca. 1945 gelatin silver print Courtesy of Instituto Lina Bo e P. M. Bardi

At the end of the war years, Bo Bardi took a short trip to Isola del Giglio (Lilly Island) off the coast of Tuscany with Pietro Maria Bardi, the man she would marry in 1946.

#### LINA BO BARDI

MASP (São Paulo, Brazil, 1957-68)

Preliminary study for enclosure system with prefabricated panels and plants. ca. 1961 graphite, china ink, and collage on tracing paper

Courtesy of Instituto Lina Bo e P. M. Bardi

For a long time during the design phase for MASP (Museum of Art, São Paulo), Bo Bardi pursued the idea of enclosing the main elevated volume in pre-fabricated panels covered with plants. Similar to the Cirell House and other buildings she designed in the early 1960s, this approach was abandoned for technical reasons in favor of a light glass enclosure.

## LINA BO BARDI

MASP (São Paulo, Brazil, 1957-68)

Preliminary conceptual study for external staircase. ca. early 1960s

Watercolor and graphite on parchment paper

Courtesy of Instituto Lina Bo e P. M. Bardi

Influenced by Antoni Gaudí's study of organic shapes, Bo Bardi originally conceived of the staircase giving access to the elevated volume at MASP (Museum of Art, São Paulo) based on tropical Heliconia plants. She revisited this proposal three decades later in her last, unfinished project for the Vera Cruz cultural center outside of São Paulo.

LINA BO BARDI
Personal photo album
Viagens [Travels]. 1956
gelatin silver prints
Courtesy of Instituto Lina Bo e P. M. Bardi

In 1956, Bo Bardi and her husband took a road trip from Italy to Portugal and stopped in Catalonia along the way. This series of images are photographs Bo Bardi took of Antoni Gaudí's projects in Barcelona and of rural constructions in the Iberian Peninsula. Her direct encounter with such works largely influenced her architectural beliefs and practice in the following years.

#### LINA BO BARDI

SESC Pompéia (São Paulo, Brazil, 1977-1986) Preliminary site and landscaping study. 1977 watercolor and graphite on cardstock Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi's initial studies for SESC Pompeia Leisure Center in São Paulo reconciled architecture and natural landscape. This drawing demonstrates how she aspired to integrate plants, rocks, and water into the existing factory structure. Though intense landscaping was not feasible, she creatively incorporated many of those features in the final project.

#### LINA BO BARDI

SESC Pompéia (São Paulo, Brazil, 1977-1986) Preliminary study of interiors with terraces. 1977 watercolor, China ink, and pencil on paper Courtesy of Instituto Lina Bo e P. M. Bardi

This initial study for the adaptation of SESC Pompeia Leisure Center in São Paulo illustrates Bo Bardi's desire to maintain the old structures and introduce an independent system of elevated platforms surrounded by plants. She imagined the main hall to have the atmosphere of a greenhouse, integrating nature and architecture.

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952). 2017 Physical model and digital fly-through rendering Architect Lina Bo Bardi mixed media California State Polytechnic University, Pomona

CalPoly architecture student fabricators: Roland Argomaniz Anya Budzinskaya, Juan Carlos De Robles, Osvaldo Gutierrez Munoz, Alyssa Kinney Jocelyn Lopez, Socrates M Medina, \*Kyle Ng, Kojchakorn "New" Ngamnimitthum, Christina Younger \* indicates students who worked on the digital fly-through renderings

Cirell House (São Paulo, Brazil, 1957-1958). 2017 Physical model and digital fly-through rendering Architect Lina Bo Bardi mixed media California State Polytechnic University, Pomona

CalPoly architecture student fabricators: Sonny Contreras, \*Javier Correa, Andres Alexis Valdez III, Youstina Ashraf Youssef, \*Daniel Sanchez \* indicates students who worked on the digital fly-through renderings

VERONIKA KELLNDORFER, German, born 1962
Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952)
Tree House (Casa de vidro). 2014
Architect Lina Bo Bardi
transparent silkscreen print on glass, edition of 5
Collection of Deborah Irmas

This depiction of the Bardi House employs an innovative technique invented by Veronika Kellndorfer, who silkscreens her photographic print on glass, fixing her image using a process similar to the firing of a ceramic plate. By representing Bo Bardi's house using the reflective and transparent qualities of glass, Kellndorfer extends the lived experience of the structure to its depiction. She tones her image light green, further reinforcing the dialogue between the design of the building and its verdant setting.

### VERONIKA KELLNDORFER

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952)

Quadrado [Casa de vidro]. 2015

silkscreen print on dichroic glass, edition of 5

Courtesy of the artist and Christopher Grimes Gallery, Santa Monica

This abstract, modern sculpture features photographs of the window textiles in the Bardi House. Kellndorfer connects three glass planes that have been printed using her signature process. She hinges them, constructing an intersecting, three-dimensional model. The result combines both imagery and reflections into a poetic evocation of the drapery, design, and spatial dynamics that inform Bo Bardi's modernist architecture.

### VERONIKA KELLNDORFER

SESC Pompéia (São Paulo, Brazil, 1977-1986) Cylindropuntia Fulgida. 2016 transparent silkscreen on glass, edition of 5 Courtesy of the artist and Christopher Grimes Gallery, Santa Monica

This diptych by a Berlin-based photographer highlights the interests of both Albert Frey and Lina Bo Bardi in abstraction, nature, and structure. The left side is a detail of the sky bridges in Bo Bardi's public community, recreation, and arts complex, SESC Pompéia. On the right, the branching natural structure of a jumping cholla cactus frequently associated with Frey House II rhymes Bo Bardi's concrete architectural walkways.

NELSON KON, Brazilian, born 1961
Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952)
Interior view across living room. 2002
Architect Lina Bo Bardi
archival inkjet print
Courtesy of Nelson Kon

### **NELSON KON**

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952) View of folk objects. 2002 Architect Lina Bo Bardi archival inkjet print Courtesy of Nelson Kon

#### **NELSON KON**

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952) View from the northeast. 2002 archival inkjet print Courtesy of Nelson Kon

NELSON KON, Brazilian, born 1961 Cirell House (São Paulo, Brazil, 1957-1958) East veranda. 2002 archival inkjet print Courtesy of Nelson Kon

#### **NELSON KON**

Cirell House (São Paulo, Brazil, 1957-1958) Roof detail. 2002 archival inkjet print Courtesy of Nelson Kon

#### **NELSON KON**

MASP (São Paulo, Brazil, 1957-68) View from Paulista Avenue. 2001 archival inkjet print Courtesy of Nelson Kon

## **NELSON KON**

MASP (São Paulo, Brazil, 1957-68), 2001 View of Trianon Terrace from staircase. 2001 archival inkjet print Courtesy of Nelson Kon

### **NELSON KON**

SESC Pompéia (São Paulo, Brazil, 1977-1986) View of lounge and reflecting pool. 2002 archival inkjet print Courtesy of Nelson Kon

### **NELSON KON**

SESC Pompéia (São Paulo, Brazil, 1977-1986) View of skywalks. 2002 archival inkjet print Courtesy of Nelson Kon

### ZEULER LIMA, Brazilian, born 1964

Bardi House (Casa de vidro, São Paulo, Brazil, 1949-1952) Exterior view of rear façade. 2010 archival inkjet print Courtesy of Zeuler R. Lima

### **ZEULER LIMA**

La Torraccia (Cirell House guesthouse, São Paulo, Brazil, 1964) Exterior view of front façade. 2010 archival inkjet print Courtesy of Zeuler R. Lima

#### ZEULER LIMA

La Torraccia (Cirell House guesthouse, São Paulo, Brazil, 1964) Interior view. 2010 archival inkjet print Courtesy of Zeuler R. Lima

PETER SCHEIER, Brazilian, born Germany, 1908-1979 Cirell House (São Paulo, Brazil 1957-1958)
View from the south. 1958
gelatin silver print
Courtesy of Instituto Lina Bo e P. M. Bardi

BOB WOLFENSON, Brazilian, born 1954 Lina Bo and Pietro Maria Bardi arriving in São Paulo, Brazil. 1947 gelatin silver print Courtesy of Instituto Lina Bo e P. M. Bardi

BOB WOLFENSON

Lina Bo Bardi holding her favorite lamp. 1978
gelatin silver print
Courtesy of Instituto Lina Bo e P. M. Bardi

American Institute of Architects Journal 30, no. 6 (December 1958) periodical Palm Springs Art Museum purchase

Published within a year of Lina Bo Bardi's *Contribuição propedeutica ao ensino da teoria da arquitetura* (Introductory course contribution to the teaching of architectural theory), Albert Frey's treatise parallels her interest in an aesthetic vision based on traditional human needs for shelter, security, privacy, comfort, and the inspiration of nature rather than ornamentation or decoration. For both architects, these qualities underlie their belief in modern designs that connect people, nature, building, and living.

# **PERIODICALS**

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Arts & Architecture 62, no. 10 (October 1945)
Arts & Architecture 63, no. 3 (March 1946)
Arts & Architecture 64, no. 5 (May 1947)
Arts & Architecture 65, no. 12 (December 1948)
periodicals
Palm Springs Art Museum purchase

Arts and Architecture published the Los Angeles Case Study House projects, initiated by the magazine's editor John Entenza in the January 1945 issue. The purpose of the program was to make well-designed single-family housing that would be affordable for the typical post-World War II American family. These houses, including the four by Richard Neutra shown here (#6; #13; #20; #21), along with the other Southern California architects who participated in the project, were admired by the São Paulo architects, who saw in them a similar philosophy and aesthetic. Their own glass-and-steel-framed houses were also designed according to rational and economic principles dictated by the specific climate and geography of each site. Strongly influenced by them, Oswaldo Bratke designed a home with studio in São Paulo, which the magazine also published.

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Arts & Architecture 65, no. 10 (October 1948) periodical Palm Springs Art Museum purchase

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Palm Springs Life Magazine (January 1967)
periodical
Courtesy of Albert Frey Papers, Art, Design, & Architecture Museum, UC Santa Barbara

This article identifies the core group of architects who, along with Albert Frey (misnamed Carl Frey in the text), were adapting modern design to the foothills of the mountains rimming the Coachella Valley in the 1960s. Not surprisingly, the article begins with the recently completed Frey House II, explaining how he adapted the design of his house to the hillside through a series of terraces in order to site it more naturally within the terrain. All four of the architects listed – Albert Frey, William Cody, E. Stewart Williams, and Michael Black – explain how modern construction techniques need not be at odds when building within a natural setting but can enhance it.

Popular Mechanics 56, no. 2 (August 1931) periodical Palm Springs Art Museum purchase

Soon after arriving in New York City in 1930, Albert Frey associated with A. Lawrence Kocher, the managing editor of *Architectural Record* and a native Californian. One of their earliest projects was the *Aluminaire House*, which they produced when asked to submit a design for the 1931 Architectural and Allied Arts Exposition in New York. Frey and Kocher employed the latest industrial materials and prefabricated construction for easy assembly, functionality, and affordability. The house drew enormous crowds, who were fascinated by this "home of the future," and interest in it circulated widely beyond architectural circles as this article in *Popular Mechanics* illustrates.

## **PERIODICALS**

The Architectural Review 81, no. 484 (March 1937) periodical Palm Springs Art Museum purchase

In 1934, Albert Frey drove to Palm Springs to supervise the construction of the first building on the West Coast by the firm of A. Lawrence Kocher and Albert Frey. The International Style building, the first of its kind in the Coachella Valley, was designed for Kocher's brother, Dr. J. J. Kocher, the first doctor to live and practice in the area. During the construction, Frey became enamored with the area and its desert environment, moving to Palm Springs from 1935-1937 and then returning permanently in 1939. Here he joined other progressive architects, including John Porter Clark and Richard Neutra, who were creating a design aesthetic that came to define the region and established Palm Springs as a center of experimental modernism. Curators Philip Johnson and Henry-Russell Hitchcock selected the Kocher-Samson House as one of the principle examples in their 1935 exhibition *Modern Architecture in California* at the Museum of Modern Art, New York.

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ALBERT FREY, American, born Switzerland, 1903-1998

In Search of a Living Architecture (New York: Architectural Book Publishing Company, Inc., 1939) spiral-bound soft cover edition

Palm Springs Art Museum purchase

Domus, no. 192 (December 1943) Periodical Courtesy of Instituto Lina Bo e P. M. Bardi

Lina Bo Bardi produced a pullout folio for the December 1943 issue of *Domus*, translating Albert Frey's *In Search of a Living Architecture* (1939) into Italian and replacing his illustrations with her own drawings.

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Domus, no. 213 (September 1946) Periodical Palm Springs Art Museum purchase

Frey House I (1940-41), Albert's first residence in Palm Springs (since destroyed by fire), was published in the influential Italian publication *Domus* as "Casa in California" and featured on the issue's cover. Although Lina Bo Bardi was no longer an editor of the magazine, having left to found *A – Cultura della Vita Magazine* in 1946, she continued to publish in *Domus*. Her article "Al Palazzo dell'Arte" (At the Palace of Art) directly followed the article on Frey House I in this same issue.

Domus, no. 195 (March 1944) Periodical Palm Springs Art Museum purchase

Bo Bardi and Carlo Pagani left their two-year collaboration in Gio Ponti's magazine *Lo Stile* and took over the editorial work of *Domus* at the end of 1943. During the difficult first year of Nazi occupation of Italy, both young architects published a series of articles proposing the humanization of modern architecture written by them and other architects. These included translations of Le Corbusier's and Albert Frey's books into Italian.

A – Cultura della Vita Magazine 9 (June 1946)
 periodical
 Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi collaborated with Bruno Zevi and Carlo Pagani on the creation of *A* magazine between 1945 and 1946. This provocative publication, which folded after only nine issues, aimed at discussing the role of architects in the Italian reconstruction and the modernization of country's culture, cities, society, and architecture in the period immediately following World War II.

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## PERIODICALS

Habitat, no. 1 (October - December 1950) periodical

Courtesy of Instituto Lina Bo e P. M. Bardi

Habitat, no. 8 (July – September 1952) periodical

Courtesy of Zeuler R. Lima

Habitat, no. 10 (January - March 1953)

periodical

Courtesy of Instituto Lina Bo e P. M. Bardi

Bo Bardi and her husband Pietro Maria Bardi conceived Habitat magazine in 1950 in association with MASP (Museum of Art, São Paulo) and its Institute of Contemporary Art. They edited the magazine until 1954 as an innovative vehicle for the appreciation, education, and discussion of Brazilian culture and art with no boundaries between tradition and modernity or between popular and erudite productions.

Interiors 112, no. 10 (May 1953)

periodical

Palm Springs Art Museum purchase

Bo Bardi had the opportunity to publish her design work in the United States given the connection between the director of the MASP (Museum of Art, São Paulo), Assis Chateaubriand, and Nelson A. Rockefeller, trustee at MoMA. Rockefeller played an essential role in the promotion of cultural dialogues between the US and Latin American countries at the outset of the Cold War. This issue features Lina Bo Bardi's first architectural project, her iconic home in Morumbi, São Paulo, also known as "Casa de vidro" (1949-52).

Interiors 113, no. 4 (November 1953)

periodical

Palm Springs Art Museum purchase

Lina Bo Bardi's most famous design object is her innovative Bowl Chair, which was published to acclaim and represented on the cover of the November 1953 issue of the American Magazine Interiors. It was one of a number of objects that she designed in conjunction with her Bardi House (Casa de vidro, 1949-52), which was published in the May 1953 issue of Interiors as "Built in Brazil: a light glass casa in the air."

Lo Stile, no. 4 (April 1941)

periodical

Palm Springs Art Museum purchase

Lo Stile, no. 11 (November 1951)

periodical

Courtesy of Zeuler R. Lima

Lo Stile, no. 24 (December 1942)

periodical

Palm Springs Art Museum purchase

Bo Bardi collaborated with Carlo Pagani between 1941 and 1943 in Gio Ponti's newly created design magazine Lo Stile. She co-authored short articles about home living and interior decoration, produced several illustrations, and worked on the magazine's graphic design.

Revista Rio 2, no. 92 (February 1947)

periodical

Courtesy of Instituto Lina Bo e P. M. Bardi

In February 1947, a few months after arriving in Brazil, Bo Bardi published her first article in the country, "Na Europa a casa do homem ruiu" (In Europe, the house of man collapsed). It appeared in *Rio* magazine, a Sunday arts and culture publication. The article, also her first one in Portuguese, drew attention to the post-World War II cultural and architectural crisis in Europe and called for the modernization and simplification of living styles.