A Japanese Constellation
Toyo Ito
Kazuyo Sejima
SANAA
Ryue Nishizawa
Sou Fujimoto
Akihisa Hirata
Junya Ishigami

The very walls of the Museum are now the beneficiaries of this lineage in the graceful canopies of Yoshio Taniguchi's 2004 extension that frame the sculpture garden. Together with the collection's representation of the Japanese postwar turn to utopic, technoscientific schemes for cities, exemplified by Metabolist projects like Kisho Kurokawa's Helix City (1961) and Fumihiko Maki's proposed megastructures, as well as the imprint of Japanese influence in works from Frank Lloyd Wright to Rem Koolhaas, this history runs through the Museum's holdings. *A Japanese Constellation* introduces a contemporary chapter, turning to an architecture both in conversation with and responding to these earlier projects.

With *A Japanese Constellation*, one of the Museum's first exhibitions in ten years to focus on architecture from a particular country, and the first dedicated solely to Japanese practitioners, curator Pedro Gadanho focuses on a small cluster of contemporary Japanese architects working within the larger field, exploring their formal inventiveness and close professional relationships to frame a radical model of practice in the twenty-first century.

Unique in focus, *A Japanese Constellation*’s forty-four projects represent a diverse panorama of work from small domestic projects to museums. Presented in models, drawings, and projected slideshows, the work highlights the significant structural innovations and use of transparent and lightweight materials, while foregrounding the architects’ refreshing commitment to the social lives of their buildings, reviving a social conscience that characterized earlier avant-gardes. Drawing on Japanese material traditions, the gallery design casts aside walls for soft partitions of semitranslucent fabric, which act as surfaces for multimedia and provide an immersive visual experience.

The luminous presentation in the gallery is complemented by the catalogue’s generous color portfolios and critical essays by curators, architects, and scholars writing both from within and outside of Japan, which situate this architectural genealogy within a longer chronology of Japanese practice and, more broadly, a tangled inheritance of global modernity. *A Japanese Constellation* promises to be an indispensable resource for practitioners, students of architecture, and the general public.

I congratulate Pedro Gadanho, Director, Museum of Art, Architecture and Technology, Lisbon, for his engagement in theorizing new directions in contemporary architecture. Begun during his appointment as Curator of Contemporary Architecture at MoMA, *A Japanese Constellation* has been long in the making. His dedication and insight, together with the support of Phoebe Springstubb, Curatorial Assistant, Department of Architecture and Design, have brought this catalogue and exhibition to fruition. On behalf of the Trustees and staff of the Museum, I am grateful to the E. Rhodes and Leona B. Carpenter Foundation, The Japan Foundation, and Chris A. Wachenheim for major support in funding this endeavor. I deeply appreciate the generous funding provided by Obayashi Corporation, Kajima Corporation, Shimizu Corporation, Takenaka Corporation, the Graham Foundation for Advanced Studies in the Fine Arts, Kumagai Gumi, and The Obayashi Foundation. I extend sincere thanks for additional funding provided by MoMAs Annual Exhibition Fund and special thanks to Muji. The Dale S. And Norman Mills Leff Publication Fund provided essential support for this book.

Glenn D. Lowry
Director, The Museum of Modern Art
A Japanese Constellation highlights a luminous configuration of architects; the realiza-
tion of this ambitious exhibition and catalogue would not have been possible without a
corresponding group of collaborators who dedicated innumerable hours and exper-
tise. At The Museum of Modern Art, we are grateful to the leadership and counsel of
Glen D. Lowry, Director; Ramona Bannayan, Senior Deputy Director for Exhibitions,
Collections, and Programs; Todd Bishop, Senior Deputy Director, External Affairs;
James Gara, Chief Operating Officer; Peter Reed, Senior Deputy Director for Curato-
rial Affairs; and Trish Jeffers, Director of Human Resources.

The exhibition has been the beneficiary of a generous group of supporters. We
extend sincere thanks to the E. Rhodes and Leona B. Carpenter Foundation, the Japan
Foundation, Chris A. Wachenheim, Obayashi Corporation, Kaijima Corporation, Shimizu
Corporation, Sekisui House, Kawasaki City, the Graham Foundation, the Rockefeller
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we deeply appreciate the in-kind support from MUJI, which provided the materials for the exhibition's fabric walls and furniture.

The project is indebted to the group of architects featured in the exhibition.
They were extremely generous and helpful hosts during trips to Tokyo, gave us unfet-
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accommodated the sometimes unpredictable process of putting together an exhibition.
Together with Phoebe Springstubb, Curatorial Assistant, I extend warm thanks to the
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Tommy Haddock, Kenichi Fijiwasa, and Shohei Yoshida of Kisho Kurokawa’s Office;
Tommy Haddock, Kenichi Fujisawa, and Shohei Yoshida of Kisho Kurokawa’s Office;
Office of Ryue Nishizawa, and SANAA; Sou Fujimoto, Hugh Hu, Nikkis Minemura, and
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Archives, College of Environmental Design, University of California, Berkeley; and
Sharon and Bob Prince of Grace Farms, who generously supported the fabrication of a
new model for the exhibition that has enriched it immensely.

The Department of Publications, led by Christopher Hudson, has been critical to
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We would also like to thank dedicated colleagues around the Museum who have
lent their time and expertise to the exhibition. We thank Kim Mitchell, Chief Com-
munications Officer, Margaret Doyle, Director of Communications, Paul Jack, Com-
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of interns made essential contributions at various points during the preparations:
Annie Madigan, Phoebe Springstubb, Phoebe Springstubb, and Natasha Smith, who
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production, provided careful work on image permissions, proofing, and the organiza-
tion of exhibition slideshows.

Lastly, we wish to acknowledge the thoughtful contributions of authors Terunobu
Fujimori, Taro Igarashi, and Julian Worrall to this publication.

Pedro Gadano
Director, Museum of Art, Architecture and Technology, Lisbon
erraticism and instability of national and global
toward the previous wave of Japanese avant-
called a “vibrant and stimulating” architecture
restraint and precise materiality of Tadao Ando's
arena. Working at the crossroads of technological
versely, embraced the imaginative possibilities
Prize, each of the aforementioned architects
renewal of tradition, of radical spatial possibil-
important model for the architecture of the
refiguration of [the] information vortex.
emphasized, destabilized the “idea of borders between
rearrangement of hierarchical relationships
important model for the architecture of the
longer has the power to change society. Archi-
Architecture that is modern in style only no
the hierarchical thinking inherent in conven-
tional approaches to architecture. Her Women’s
28 His pursuit of “pure possibilities” afforded his
immediate future must channel its critical
to invent novel architectural languages with each
to surpass the apparent randomness of aesthetic
Aesthetic Statements and
As a philosopher I have approached architec-
to the phenomenological viewpoint and
exhibit a certain amount of mass production of prod-
consumption.

Embracing postmodernism’s semantic
diversity rather than its style, Itō’s proposals for a
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refiguration of the existing social system” and as a form
of social critique. This belief could be seen
as problematic when worldwide the architectures
mission vis-à-vis the “deconstructivist” relation-
delivery of functional artifacts. Yet, following
the reception of Itō’s groundbreaking 2001 Sendai
Mediatheque (fig. 5), a cultural resource center
in Sendai, the architect confessed he felt
heartened that his most radical proposal to date was
also received with enthusiasm. In his light.
One of Itō's main objectives for the center,
whose holdings include film, books, magazines,
and other printed media and physical “barriers”
that have traditionally divided various mediums,
and to propose a model for “how
in the face of social exigencies should be from now on.”
Itō’s architectural oeuvre is
both within the architectural milieu and among everyday users,
affirming that an architectural design concept
can in fact influence social perceptions and that,
as held by the early modernists, architecture’s
“critical spirit had to power to change society.”
Itō’s affirmation of an architectural design concept
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the natural environment—that is,
In the 1990s, the circumstances were suited once again for Japanese architecture to become a reference for architects outside Japan. As an intensely metropolitan culture thrived in Tokyo and other major Japanese cities, the nation’s architects found themselves immersed in a global culture as much as in an urban society fronting numerous trends that would come to mark the start of the twenty-first century—through the explosion of consumer culture to the omnipresence of information to the increasing omnipresence of information to the increasing...
In the early twentieth century, like-minded artists disposed to upset social conventions and probe radical critiques of the periods of social transformations collectively formed avant-garde movements. The quest for personal artistic success came as an afterthought, if it emerged at all. By the end of this century, however, the art market, and the dramatically increased financial value of individual works of art, incentivized artists to develop local and international reputations, and led to the appropriation of the formal accomplishments of successive avant-garde productions. In parallel, the social significance of architecture needed to be reconsidered. Ito has strived not only to probe “the meaning of public buildings” but also to interrogate “the excessive importance architects attach to expression through individual and collective accomplishments and architects conceived architecture “according to a manual and with little consideration of the people who would in fact be using the buildings.” Ito has called “ready-made ideas,” but it was also indicative of the struggle between the respect for a powerful idea and all technical achievements and legal regulations. In parallel, while Ito’s architectural ideas constituted the fundamental driving force in overcoming constraints and capturing people’s interest, he increasingly relied on his discussions with residents, local communities, and clients—that is, to say, on those who would in fact be using the buildings.

The 2011 Great East Japan Earthquake only reinforced this changed attitude. In the wake of the disaster, architectural discourse opened a new consciousness, recognizing that the buildings’ image or its interest in interiors derived from social and anthropological needs, and that the sophisticated use of materials such as glass and metal. Architecture in Japan would then turn to the natural and symbols, and with them, any simplistic version of architectural beauty. Although terms such as “landscape” and “experience” were soon matched by Sejima’s and later SANAA’s profound questioning of established functionalist blueprints, their inquiries circa 1980 were essentially needs, and the Golden Lion winning project, Home—for All—in ito together with SANAA, Fujimoto, Hirata, and other architects, structures in rural areas, enabling residents of temporary housing to gather for meetings and other architectural visions. Their success is typically well-deserved, but, like a double-edged sword, it can lead to self-reflection. In contrast, today’s starchitects tend to rebrand their share of important international projects; condemn their supposed indifference to local values; or, as outrightly blame them for the upsurge in distended skylines across contemporary metropolitan landscapes. Ito has said that the star system tends to trap its protagonists in predictable and formulaic responses to the upsurge in distended skylines across contemporary metropolitan landscapes. His notion of collective endeavor in which the desire to circumvent constraints is an afterthought, if it emerged at all. By the end of this century, however, the art market, and the dramatically increased financial value of individual works of art, incentivized artists to develop local and international reputations, and led to the appropriation of the formal accomplishments of successive avant-garde productions. In parallel, the social significance of architecture needed to be reconsidered. Ito has strived not only to probe “the meaning of public buildings” but also to interrogate “the excessive importance architects attach to expression through individual and collective accomplishments and architects conceived architecture “according to a manual and with little consideration of the people who would in fact be using the buildings.” Ito has called “ready-made ideas,” but it was also indicative of the struggle between the respect for a powerful idea and all technical achievements and legal regulations. In parallel, while Ito’s architectural ideas constituted the fundamental driving force in overcoming constraints and capturing people’s interest, he increasingly relied on his discussions with residents, local communities, and clients—that is, to say, on those who would in fact be using the buildings.

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collective arrangement; their relative proximities and distances, and their combined brilliance, suggest more than a sum of parts. Since ancient times, constellations have offered direction to those looking to the skies for guidance.

One certainly hopes that the lightness celebrated in the work of this particular constellation of architects begets a legacy that surpasses its formal and material tropes. This they do with what can only be deemed a graceful lightness of being as they avoid dogmatic manifestations and egotism. Amid the glimmer and incandescence of their aesthetic pursuits, this particular constellation of Japanese architects offers an ethical reference to the world of architecture at large. Beyond the fascination of appearances, this is why their work should remain influential.

Tokyo, July 2015

Notes


2. As cited in Anna Kata,Architecture’s ability to alter cultural perceptions and induce social change for the better. This they do with what can only be deemed a graceful lightness of being as they avoid dogmatic manifestations and egotism. Amid the glimmer and incandescence of their aesthetic pursuits, this particular constellation of Japanese architects offers an ethical reference to the world of architecture at large. Beyond the fascination of appearances, this is why their work should remain influential.

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45. For Ito, the Sendai project departed radically from the conventional design of public buildings: its innovative spatial “uniformal” departed from the commonplace grid. As he pointed out, “the space can accommodate any activity anywhere, but places within that space are differentiated by the tubes.” See Ito, “Sendai Mediahouse—Conversation with Toyo Ito,” 203.


48. As the 2000 jury citation on the Pritzker Architecture Prize website states, “The buildings by Sajima and Nishizawa seem deceptively simple, but in fact “explore like few others the phenomenal properties of continuous space, lightness, transparency, and materiality to create a subtle synthesis.” See http://www.pritzkerprize.com/2000/jury. Similarly, Hasegawa notes, “It is difficult to analyze the components, arbitrariness and looseness concealed in the simplicity of SANAA’s architecture... To understand how they capture unknown fields liberated from conventional architectural concepts, it would be far more interesting to examine how their architectural works are used over a period of time.” See Hasegawa, “An Architecture of Awareness for the Twenty-First Century,” 7.

49. The 2010 Pritzker Prize jury citation remarks that the architects’ “equivalence of spaces” gives way to the creation of “impressive, democratic buildings according to the task and budget at hand.” See http://www.pritzkerprize.com/2010/jury.


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To Create Architecture that Breathes

I prefer soft objects to hard, curved lines to straight, ambiguity to clarity, spatial diversity to functionalism, and naturalness to artificiality. Humans came out of caves or climbed down from trees and created architecture using geometry. It was considered a human virtue to create geometric order in a naturally chaotic world. Ever since, architecture has been received and appreciated as distinct from nature. The same is true of the body. Humans believe that the beautiful body is separate from nature, a perfectly proportional form to be inscribed in circles and squares. The body, however, is connected to nature through the eyes, ears, nose, and mouth. Humans used to live by rivers and absorb their taintless water as if part of a stemming stream branch. Humans were part of nature. Ecology and sustainability are gaining importance today. It is evident that architecture must be part of nature, not separate from it. Most modern architecture is composed of euclidean geometry, although there is no perpendicular grid in the natural world. Branched trees display angles of varying degrees, for example, but no branch intersects precisely at a perpendicular. Trees merely repeat a simple rule of branching, and yet they are able to produce complicated forms that fit comfortably within the natural environment. Today we are able to create architecture based on the rules in the natural world by using computer technologies. However, we should use these rules not to make forms that imitate nature but instead to create architecture that breathes and is congruous with the environment.

Toyo Ito
Sendai, a sleek, cubic structure, combines a multimedia hub, library, and information-services center for the audiovisually impaired. Interior walls are eliminated to allow for a fluid space that departs from the typical uniformity of the flat-slab-and-column construction of modern architecture. Thirteen tube-like columns support a stack of lean 508-square-foot (50-square-meter) steel floor plates. Each structural tube is an open latticework of steel that is torqued to resist building stresses and changes in cross section between floors. The dissolution of the structural columns into reticulated, lightweight forms allows each, in addition to providing support, either to carry air-conditioning and power conduits; serve as a light well; or hold vertical circulation. The facade’s double layer of glass acts as a mediated surface: by day, it fluctuates between reflection and translucency; by night, it dissolves against the illuminated building. Envisioned during the early design phase as a pliable structure of “soft tubes that waver slowly under water” and “rubber tubes filled with fluid,” the building’s remarkable transparency is, in the architect’s words, encountered “like a Japanese garden, where space comes into being as the sum total of the sequences experienced by a person walking through it.”—Phoebe Springstubb
Toyo Ito
Sendai Mediatheque
Sendai, Japan
1995–2001

Previous spread: South facade from Jozenji-dori
Above: Detail of the south facade

Aerial view of the southeast corner

Toyo Ito
Sendai Mediatheque
Sendai, Japan
1995–2001

From top: View upward into a tube. Second-floor newspaper- and magazine-browsing area.

From top: Initial sketch proposing composition of structural tubes, 1995. East-west section. Plans of the second, third, sixth, and seventh floors with information center (1), audiovisual library (2), browsing (3), offices (4), library (5), gallery (6), and studio (7).
This contemporary folly was commissioned as a temporary project to commemorate the European Union’s designation of Brugge as the 2002 European “capital of culture.” The pavilion straddled an archaeological site containing the ruins of a medieval cathedral in the city’s historic center. Lifted above a circular reflecting pool designed to protect the ruins, the pavilion’s walls and roof were made of a lightweight aluminum panel folded over a sheet of polycarbonate that served as a bridge. The honeycomb pattern, insufficiently rigid on its own, was structurally reinforced by the application of large, flat ellipses that evoke the cutouts of Belgian lace. Taking an essentially decorative pattern as its generative motif, the pavilion transformed the pattern through scale and material, forming a facade that was both structural and, with its filigreed aluminum, transparent—presence without mass. The open, honeycomb-shaped tessellations of the aluminum created a shifting perceptual experience that hid and revealed the cityscape in fragments as visitors passed through the pavilion. Reflective and ephemeral, the pavilion was a playful counterpoint to the surrounding masonry buildings. The light appearance mandated by the preservation of the historic site placed it in conversation with the existing architecture. Intended as a temporary project, the pavilion was disassembled in 2013.—PS
This dynamic structure is one of a series of temporary summer pavilions commissioned by the Serpentine Gallery since 2000 for Kensington Gardens. Developed in collaboration with the structural engineer Cecil Balmond, the design used an algorithm to distort an orthogonal grid, rotating and scaling a number of squares inscribed in a spiral to generate an unexpected, fractured form. The mathematical pattern flirted with the appearance of instability—a chaotic network of intersecting lines circumscribed by the box’s perimeter forms the building envelope. Each line was translated into an element of the steel frame—intersections creating structural equilibrium. Fabricated out of a series of welded panels that were bolted together on-site, the asymmetrical lattice of trapezoidal and triangular openings was fitted with alternating glass and aluminum panels and hosted a café along with event spaces for lectures and parties. With no discrete architectural components—columns, windows, or doors—the planes of walls, floor, and ceiling were identical patterned surfaces that boldly combined structure and figuration.—PS
Previous spread: South facade with Serpentine Gallery
From top: Café at interior. Detail of structural panels

Clockwise from top right: Site plan. Reflective ceiling plan and sections. Pavilion components: glass (1), aluminum plates (2), grillage of flat steel bars (3), aluminum plates (4), café and event space (5), plywood floor (6), steel grillage and wooden joists (7)
This flagship store for shoe and handbag retailer Tod's is located on Omotesando, an avenue of luxury retailers that has evolved into a showcase for high-profile architecture since the early 2000s. To give continuity to the L-shaped site, which has only a narrow front on the commercial avenue, the building’s facade was conceived as a continuous screen of interlocked concrete piers that evoke the neighborhood’s allées of ornamental zelkova trees. The design merges a highly abstracted, graphic interpretation of nature with the logic of its structural system—bifurcated branches thicken to trunk-like piers according to the downward flow of forces acting on the building. The robust, approximately twelve-inch-(thirty-centimeter-) thick piers, broad at ground level, taper to intricate grillwork at the top of the seven-story building. By concentrating the load bearing in the facade, the shop interiors are freed of columns with retail spaces spanning thirty-three to forty-nine feet (ten to fifteen meters). Asymmetrical openings in frameless glass offer expansive street-level displays and multiple smaller openings for the offices at the upper floors. The exploration of nonlinear geometries creates an iconic structure compelled by what Ito has described as “a constant tension generated between the building’s symbolic concreteness and its abstractness.”

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1—PS
Previous spread from left: Detail of the facade's branching concrete piers. Aerial view.
Clockwise from top left: Night view from Omotesando Avenue. Staircase inside the shop. Sixth-floor interior.

Clockwise from top right: Structural analysis of seismic loading. Abstraction of the silhouettes of zelkova trees to create the structure. Plans of the ground through sixth floors with office entrance (1), shop (2), stock room (3), offices (4), meeting room (5), showroom (6), and party room (7).

Set amidst the hills of Kakamigahara on the edge of a small artificial lake, the funeral hall Meiso no Mori (Forest of meditation) is cloaked in an undulating roof of white concrete that gives the building the appearance of suspended motion—a cloud afloat or a bird in flight. The fluid canopy is a reinforced-concrete shell that extends over more than 21,500 square feet (2,000 square meters). At a dozen points, the surface puckers and stretches to the ground to form columns that are continuous with the roof and act as structure as well as rainwater conduits. Designed to replace an older crematorium, the enclosure is set back from the roofline and includes a mix of ceremonial and back-of-house spaces organized between the columns in top-lit rooms framed in travertine. To accommodate the operational requirements of the crematorium, Meiso no Mori buries the massive machinery of the furnace into the bulk of the hill at the southwest of the site, opening the interiors to funerary rituals and serving as a meditation on form. In this way, the soft curves of the roof become a nuanced ceiling with varied heights that meet the range of funerary functions and respond to practical needs with a bold spatial and structural experiment.—PB
Meiso no Mori Municipal Funeral Hall
Kakamigahara, Japan
2004–06

Previous spread: View across the reinforced concrete roof
Clockwise from top: North facade from the pond. Waiting room interior facing the pond. View from the cemetery

From top: Structural-displacement diagram of the roof. North elevation. North-south section. Ground-floor plan with entrance hall (1), valedictory room (2), ceremonial hall (3), crematorium (4), lobby (5), and waiting room (6)
Tama Art University Library is located on the university’s graduate campus in Hachioji, a southeastern suburb of Tokyo. The upper floor hosts reading stacks and study spaces, while the ground level, which is pitched three degrees to the site’s slope, holds offices and communal spaces, including a café, gallery, and multimedia center. Illuminated by night, the library reveals a vaulted interior of tapered columns and exposed concrete that retains the feeling of a subterranean grotto. The sculpted interior, developed in an initial scheme that placed the library belowground, contrasts with a streamlined glass exterior that shears the vaults, revealing their angularity and emphasizing their semicircular sections at the building’s acute corners. Referencing classical arched structures, the columns are unusually attenuated and linear, with cruciform profiles that are generated by the intersection of two planes and minimized by a core of reinforcing steel. The spans of the arches vary, with the largest fifty-three feet (sixteen meters). They are regulated by a structural grid of curved lines that creates sinuous colonnades organically extending across the interior. Weaving through the arches, book stacks follow their own curved logic, creating labyrinthine reading spaces that are experienced entropically. —PS
Previous spread: Corner of the east facade
Clockwise from top: Second-floor open stacks and reading area, North facade with main entrance, Staircase leading to the
second floor

Clockwise from top left: Diagram of arched structural system of steel and concrete, Plans of the second, ground, and basement
floors with open-stack reading room (1), closed stacks (2), multimedia center (3), offices (4), arcade gallery (5), café (6), and
compact and valuable stacks (7), Section detailing stages of arch construction
Nested in a compact residential neighborhood across from one of Tokyo's elevated rail lines in the western part of the city, ZA-KOENJI is a six-story, mixed-use theater. The main theater and café are located aboveground, while the bulk of the building is recessed below, including a second theater, a hall for the choreographed dance festival Awa Odori, and rehearsal, film, and music-editing rooms. The theaters are vertically stacked to accommodate the small site; to maintain acoustic conditions, Ito devised a structural system that individually insulates each floor. The building's roof was fabricated with thin, black steel plates that define peaked and scalloped surfaces. Its expressionistic forms were generated by carving platonic solids—cones and cylinders—from a cube, creating a geometrically complex shape that could be unrolled into planar surfaces for construction. These forms give the theater a bold, asymmetrical profile that inserts an animated presence among the flat and ninety-degree planes of the surrounding buildings. Inside this unusual volume, circular light wells, made out of frosted glass inset in the steel, create an atmospheric constellation of indirect light within the deep red interiors.—PS
Clockwise from top left: Staircase. Ground-floor entrance foyer. Aerial view of the west facade.

Clockwise from top left: Section with loading bay (1), administration (2), ZA-KOENJI One (3), Awa-Odori Hall (4), ZA-KOENJI Two (5), and rehearsal room (6). West elevation. Study for the curved surface geometry of the roof. Ground-floor plan with foyer (7).

Roof plan

Curved surfaces

A B C D E F G
In this unrealized proposal to replace an existing brutalist building by Mario Ciampi, a grid of contoured white forms sheathed in glass combines an art museum and a film archive. Located on the south-eastern edge of the University of California, Berkeley, campus, where the university meets the city, the proposed three-story structure holds exhibition spaces and research facilities accessible to students, faculty, and the public. The upper two floors house galleries, while the lower floor holds a theater, black box, and restaurant. The design was generated through a series of transformations to an orthogonal grid. Each ninety-degree corner is gently warped to become a radiused curve. Where the wall meets the floor or two walls intersect, a softened threshold is introduced by folding the plane seamlessly into the adjoining space. The sculptural walls offer a blended sequence of rooms, with the removal of the edge creating a psychological and visual experience of continuity, even as the plan retains traces of the grid’s ordered quadrants. Encasing a thin layer of concrete between two steel plates creates the tautly curved surfaces. With its design period coinciding with the 2008 financial collapse, the project was never realized due to budget reasons. —PS

University of California, Berkeley Art Museum and Pacific Film Archive
Berkeley, California. Project 2006–10
University of California, Berkeley Art Museum and Pacific Film Archive
Berkeley, California. Project 2006–10

Previous spread: Perspective of the southeast corner looking toward the city
From top: South elevation. Perspective of the south facade from Center Street

Clockwise from top right: Plans of the third, second, and ground floors with gallery (1), terrace (2), event space (3), offices (4), study center (5), screening room (6), art and film library (7), theater lobby (8), theater (9), black box (10), restaurant (11), and main entrance (12).
West-east section. Distortion of the orthogonal grid to create curved walls and continuous spaces. Diagram of curved gallery walls.

Conceptual sketch of interconnected functions
Located on a hillside of Omishima, a small island on the Seto Inland Sea, Toyo Ito Museum of Architecture, Imabari, is composed of Steel Hut, an exhibition space for Ito’s work, and Silver Hut, an educational workshop and research center. The two buildings are in close proximity, linked by landscaping and a winding path. Steel Hut is a series of polyhedral modules, each with ten-foot (three-meter) sides that link together to create exhibition galleries. Fabricated out of steel painted black, the geometric forms stand apart from the landscape and give the building the appearance of an oversized molecular structure—an effect experienced on the interior as well, where gallery walls angle according to the number of sides.

Three stacked modules form a Brancusi-like tower for hosting lectures and roundtables. Nearby, Silver Hut reconstructs, virtually unaltered, Ito’s pavilion-like Tokyo home design from 1984. Seven vaulted roofs made out of lightweight steel span concrete posts set at approximately 12-foot (3.6-meter) distances. Vaults extended over two bays create larger courtyard spaces. The use of translucent materials references traditional Japanese domestic architecture while reprising Ito’s early experiments with lightweight, provisional designs that privileged spare, prefabricated elements over form.—PS
Previous spread: Steel Hut looking west toward Seto Inland Sea
Clockwise from top: Silver Hut looking west. Aerial view of the site. Interior of a workshop in Silver Hut
Clockwise from top: Diagram of Silver Hut components. Silver Hut plan with outdoor workshop (1), archive (2), and storage (3). Steel Hut ground-floor plan with entrance hall (4), gallery (5), and salon (6). Steel Hut section

Toyo Ito

Toyo Ito Museum of Architecture

Imabari, Japan

2008–11
Located toward the northern part of the National Taiwan University campus, the College of Social Sciences is comprised of two buildings: a single-story library and, rising above, an elongated eight-story block holding classrooms, conference rooms, and research laboratories. The beaux-arts style campus, established by the Japanese colonial government in the 1920s as Taihoku Imperial University, is dominated by a central axis along which the main university buildings are symmetrically organized. The college follows this general alignment while subtly introducing geometry inspired by patterns found in nature. The facade of the taller teaching wing is a regular concrete frame that extends beyond the line of the glass to become shade balconies and eaves; interspersed within this grid, two- and three-story voids introduce gardens, light, and air across the building. The library’s open-stack reading area is composed around a grove-like cluster of columns. The locations and orientations of the columns were determined algorithmically; each slender, tubular support unfurls at the top into an irregular ellipse. Gathered together, these differently sized capitals leave gaps and crevices between, illuminating the library from above by dappled natural light. The reading room’s geometry carries through both to the roof, where the elliptical planes hold an artificial lawn, and the surrounding plaza, where the forms are transformed into ovoid greens among winding walkways. —PS
Previous spread: Library reading room at night
Clockwise from top: Open stacks in the reading room. View of the library with the classroom and research block behind.
Reading room

Clockwise from top right: Radial pattern of a water droplet. Diagram of the fiber-reinforced plastic framework used to construct the reading-room columns. Section detail of the ground-floor reading room. Plane of the ground and third floors with open-shelf reading room (1), classroom (2), library entrance (3), exhibition space (4), offices (5), conference hall (6), and garden (7)
Minna no Mori Gifu Media Cosmos, a two-story library, multimedia, and community center located in downtown Gifu, began with the idea of enclosing many homes under one roof. This idea is most explicitly explored in the second-floor reading room, with a series of suspended “globes”—as Ito calls them—creating intimate reading cupolas within the larger space of the library. Fabricated out of sheer polyester fabric stretched over rings, each globe shelters a space for a specific reading audience and is bounded by radially arranged book stacks. These individualized spaces for reading, play, and study are brought together beneath a majestic, gently rolling roof of laminated Japanese cypress. A diagonal grid of thin strips interlaced twenty-one-layers deep provides sufficient rigidity without additional structural steel. The fragrant cypress adds a less tangible, atmospheric dimension to the space, while the latticework allows in natural light. At the ground level, a series of volumes clad in different materials—a community theater, a gallery, an information center, and closed book stacks—give the impression of a loose composition of individual buildings along a public street. The project represents a shift in Ito’s practice toward more ecologically sustainable, community-oriented design, which has had particular resonance following the 2011 Great East Japan Earthquake.—PS
Minna no Mori Gifu Media Cosmos
Gifu, Japan
2011–15

Previous spread: Browsing "globe"
Clockwise from top: Second-floor reading room, Kinkazan terrace. Aerial view at night

Clockwise from top right: Initial sketch of the circulation of air and light through reading "globes," 2010. Ground-floor plan with entrance hall (1), restaurant (2), book stacks (3), lecture hall (4), offices (5), community gallery (6), and theater (7). Section detail at a reading "globe." Second-floor plan with open stacks (8), reading "globes" (9), and terrace (10)
National Taichung Theater, located in a redevelopment zone near the center of the Taiwanese city, holds three opera theaters—the Grand Theater boasts seating for up to two thousand people—along with retail shops and restaurants that open onto a landscaped plaza at the lower floors. The building’s porous structure, described as a sound cave, is the result of a fluid topological grid in which three-dimensional curved shapes soften and distort the divisions between horizontal and vertical planes. Individually bent vertical truss walls form the catenary curves of the halls, skinned in metal mesh and given supple surfaces through sprayed and poured concrete. The concave spaces bear horizontal floors to accommodate seating and theater stages. National Taichung Theater realizes a longstanding theme in Ito’s work, in which the grid is modified and transformed to produce sensory-rich spaces that are as variable as those of the natural world. At the opera house, this connection to the environment is realized by merging interior and exterior in cambered forms that resemble the digestive organs that in Ito’s words “are in some ways inside and in some ways outside the body.”—PS
Toyo Ito
National Taichung Theater
Taichung, Taiwan
2005–ongoing

Previous spread: View toward the city
From top: Southeast facade from the plaza. Main entrance at the southeast facade

From top: Plans of the fifth and second floors with playhouse (1), grand theater (2), dressing room (3), terrace (4), foyer (5), event space (6), offices (7), restaurant (8), and green room (9). Catenoid construction unit made up of truss walls. North-south section

La Biennale di Venezia, the 2010 Praemium Imperiale, and the Golden Lion for Lifetime Achievement at the Museum. Ito has received numerous international awards including, most recently, the 2013 Pritzker Architecture Prize. He has also been published widely and his work has been exhibited internationally most recently in Sou Fujimoto: Futures of the Future (2013), held at Tokyo Metropolitan and Shanghai Museum of Contemporary Art. He was awarded a Royal Institute of British Architects International Fellowship in 2012, and received the 2014 WSJ Magazine Architecture Innovator Award, 2013 Marcus Prize, and 2008 Private House award from the World Architects Federation for Final Wooden House. He was co-recipient of the Golden Lion at the thirteenth International Architecture Exhibition, La Biennale di Venezia, in 2012. In 2008, Fujimoto published Primitive Future (INAX, Tokyo), which became the year’s bestselling architecture book.

Akihisa Hirata (born Osaka, 1971) was a part-time lecturer at Tohoku University and completed postgraduate studies at the Graduate School of Design, Eindhoven University of Technology. He was awarded a Royal Institute of British Architects’ 2008 New Face Award.

Junya Ishigami studied architecture at Toyo University, receiving an MFA in 2000, before working at Kazuyo Sejima & Associates. In 1999, Ishigami founded Akihisa Hirata Architects (establishe

Sou Fujimoto (born Hokkaido, 1971) was awarded the Golden Lion and the Global Award for Sustainable Architecture and was exhibited in 2011 at the Barbican’s Curve, a gallery space in London.

At the Museum of Contemporary Art in Krakow and at the Triennale di Milano. An exhibition of his work, Akihisa Hirata: Tangling, was held at London’s Architecture Foundation Project Space, in 2012, and at Grand Hôtel Images, in Horum, Belgium, in 2013. Hirata was a co-recipient of the Golden Lion at the thirteenth International Architecture Exhibition, La Biennale di Venezia, in 2014, and has also been awarded the 2016 Col-ored Concrete Works Award, the 2012 Elle D’e- sign Award, ELLE DEC’O’s Young Japanese Design Talent Award, in 2009, and the Japan Institute of Architects’ 2008 New Face Award.


Junya Ishigami is currently an associate professor at Tohoku University in Sendai. In 2015, he taught at Princeton University School of Architecture, and in 2014, at Harvard Graduate School of Design. Ishigami’s installation work includes Balloon (2007) at the Museum of Contemporary Art in Tokyo, and Architecture as Air: Study for Château la Coste (2010) at the twelfth International Architecture Exhibition, La Biennale di Venezia, which was awarded the Golden Lion and the Global Award for Sustainable Architecture and was exhibited in 2011 at the Barbican’s Curve, a gallery space in London.

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