

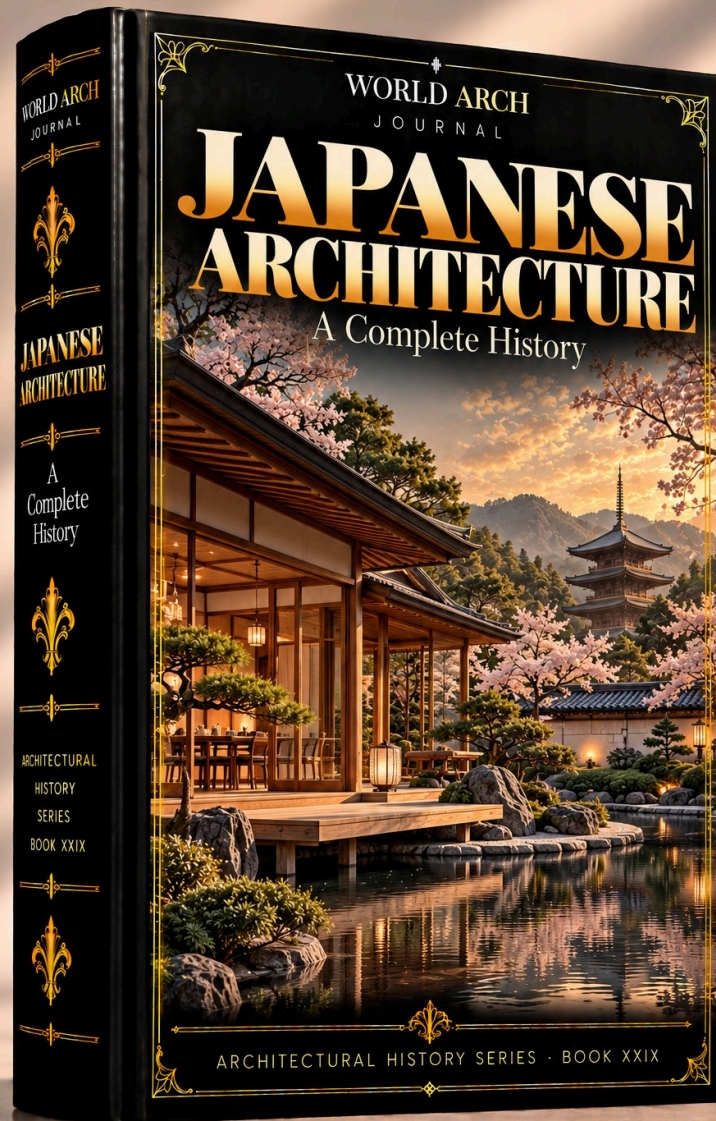




Photo: Odd Roar Aalborg, via Wikimedia Commons (CC BY-SA 4.0) . Source: https://commons.wikimedia.org/wiki/File%3AThe_garden_around_the_Katsura_Rikyu_Imperial_Villa_in_Kyoto%2C_Japan.jpg

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

Japanese Architecture: A Complete History

From the timber frame and the tatami module to Ise, Horyu-ji and Himeji, from Katsura and the tea house to Metabolism and the masters of today — how Japan built in wood for a thousand years, met the West, and remade its architecture without losing it, and the five signs by which any Japanese building can be read.

PERIOD

From prehistoric pit dwellings and the first timber temples of the seventh century to the present — with the great flowering of shrine, temple, castle and townhouse building between the seventh and nineteenth centuries, and the modern reinvention from 1868 onward

GEOGRAPHY

The Japanese archipelago, centred on Nara, Kyoto and Tokyo, with the great temple cities of Nara and Kyoto, the castle towns of Himeji and Matsumoto, the mountain villages of Shirakawa-go, and the modern capitals of Tokyo and Osaka

KEY BUILDINGS

The Grand Shrine of Ise, Horyu-ji and Todai-ji, Himeji and Matsumoto castles, the machiya of Kyoto, Katsura Imperial Villa, Ryōan-ji, the Joan tea house, Tokyo Station, the Yoyogi National Gymnasium, the Nakagin Capsule Tower, the Church of the Light, the 21st Century Museum of Contemporary Art in Kanazawa, and the Asakusa Culture Tourist Information Center

KEY FIGURES

Sen no Rikyu, Bruno Taut, Josiah Conder, Tatsuno Kingo, Kenzo Tange, Kisho Kurokawa, Fumihiko Maki, Arata Isozaki, Tadao Ando, Kengo Kuma, Kazuyo Sejima, Ryue Nishizawa and Shigeru Ban

PATRONS

The imperial court and the great temples of Nara, the shoguns and daimyo lords of the castle age, the merchant houses of Kyoto, the Meiji state and its ministries, the corporations and municipalities of postwar Japan, and, today, private clients, museums and cities

MATERIALS

Japanese cedar and cypress for posts, beams and brackets; bamboo for fences, screens and scaffolding; paper for shoji and fusuma; clay and plaster for walls; thatch, bark and tile for roofs; stone for castle walls and garden rocks; and, from the twentieth century, reinforced concrete, steel and glass

STRUCTURE

The post-and-beam timber frame on stone footings, joined by mortise, tenon and complex bracket arms; the ken module and the tatami mat as measures of plan; the deep-eaved roof carried on brackets; the raised timber floor; and, in the modern period, the concrete frame, the suspended roof and the capsule

DECORATION

Almost none applied in the classical sense: the grain of the wood, the texture of plaster, the shadow of a lattice and the composition of a garden do the work of ornament, with colour reserved for shrine vermilion, temple sculpture and the painted fusuma of the great houses

First published 2026-10-24 by World Arch Journal.

Written and edited by World Arch Journal.

Web edition: <https://worldarchjournal.com/magazine/architectural-history-styles/japanese/>

© World Arch Journal 2026. All rights reserved.

Free for personal reading and study; no redistribution or resale.

Cover artwork © World Arch Journal.

Photographs are reproduced from Wikimedia Commons under the licences stated in the illustration credits.

The Book at a Glance

Japanese architecture is the longest continuous timber tradition on earth. For more than a thousand years, shrines, temples, castles, townhouses and farmhouses were built from the same kit of parts — posts and beams joined without nails, floors measured in tatami mats, walls that slide rather than stand — and repaired, rebuilt and renewed in the same materials, so that a building could be both ancient and new at once. This book follows that tradition from its beginnings through the sacred architecture of Shinto and Buddhism, the castles of the samurai age and the merchant streets of Kyoto, to the refinements of Katsura, the garden and the tea house, and then to the shock of the Western encounter in the Meiji period, the concrete experiments of Metabolism, and the contemporary masters — Ando, Kuma, SANAA and Shigeru Ban — who carry the timber idea into concrete, glass and paper. It is honest about the record: the dates of the oldest temples are debated, the most famous villa was partly invented by its modern admirers, the most famous capsule tower was demolished in 2022, and the question of what counts as authentic in a tradition built on rebuilding has no settled answer. The debates are flagged where they arise, because Japanese buildings reward the reader who looks at a joint, a threshold and a roof before reading a single label.

Period	From prehistoric pit dwellings and the first timber temples of the seventh century to the present — with the great flowering of shrine, temple, castle and townhouse building between the seventh and nineteenth centuries, and the modern reinvention from 1868 onward
Geography	The Japanese archipelago, centred on Nara, Kyoto and Tokyo, with the great temple cities of Nara and Kyoto, the castle towns of Himeji and Matsumoto, the mountain villages of Shirakawa-go, and the modern capitals of Tokyo and Osaka
Key buildings	The Grand Shrine of Ise, Horyu-ji and Todai-ji, Himeji and Matsumoto castles, the machiya of Kyoto, Katsura Imperial Villa, Ryoan-ji, the Joan tea house, Tokyo Station, the Yoyogi National Gymnasium, the Nakagin Capsule Tower, the Church of the Light, the 21st Century Museum of Contemporary Art in Kanazawa, and the Asakusa Culture Tourist Information Center
Key figures	Sen no Rikyu, Bruno Taut, Josiah Conder, Tatsuno Kingo, Kenzo Tange, Kisho Kurokawa, Fumihiko Maki, Arata Isozaki, Tadao Ando, Kengo Kuma, Kazuyo Sejima, Ryue Nishizawa and Shigeru Ban
Patrons	The imperial court and the great temples of Nara, the shoguns and daimyo lords of the castle age, the merchant houses of Kyoto, the Meiji state and its ministries, the corporations and municipalities of postwar Japan, and, today, private clients, museums and cities
Materials	Japanese cedar and cypress for posts, beams and brackets; bamboo for fences, screens and scaffolding; paper for shoji and fusuma; clay and plaster for walls; thatch, bark and tile for roofs; stone for castle walls and garden rocks; and, from the twentieth century, reinforced concrete, steel and glass
Structure	The post-and-beam timber frame on stone footings, joined by mortise, tenon and complex bracket arms; the ken module and the tatami mat as measures of plan; the deep-eaved roof carried on brackets; the raised timber floor; and, in the modern period, the concrete frame, the suspended roof and the capsule
Decoration	Almost none applied in the classical sense: the grain of the wood, the texture of plaster, the shadow of a lattice and the composition of a garden do the work of ornament, with colour reserved for shrine vermillion, temple sculpture and the painted fusuma of the great houses

Contents

CHAPTER I The Timber Tradition: Joinery, Modules, and the Post-and-Beam House

CHAPTER II Shinto Shrines: Ise and the Rebuilt Sacred

CHAPTER III Buddhist Temples: Horyu-ji to Todai-ji

CHAPTER IV Castles and Samurai Architecture: Himeji and Matsumoto

CHAPTER V Machiya Townhouses and the Merchant City: Kyoto

CHAPTER VI Katsura Imperial Villa and the Sukiya Ideal

CHAPTER VII Gardens as Architecture: Dry Gardens and Stroll Gardens

CHAPTER VIII Tea Houses and the Aesthetics of Wabi-Sabi

CHAPTER IX Materials and Construction: Wood, Paper, Earth, Stone, Concrete

CHAPTER X Meiji Modernization and the Western Encounter

CHAPTER XI Metabolism and Postwar Concrete: Tange, Kurokawa, Maki

CHAPTER XII Contemporary Masters: Ando and Kuma

CHAPTER XIII Contemporary Masters: SANAA and Shigeru Ban

CHAPTER XIV The Modern Japanese House and City

CHAPTER XV Reception: Authenticity, Earthquakes, and the Timber Tradition Today

CHAPTER XVI Debated Points: What We Do Not Know, and Why It Matters

CHAPTER XVII Japan Abroad: The Influence of Japanese Architecture

CHAPTER XVIII Reading a Japanese Building: Five Signs

REFERENCE Timeline · Gazetteer · Key figures · Glossary · Bibliography · Illustration credits

List of Illustrations

1. Tadao Ando — Photo: Christopher Schriener, via Wikimedia Commons (CC BY-SA 2.0)
2. Inside the Asakusa Center — Photo: Flibustrier, via Wikimedia Commons (CC BY 4.0)
3. The Church of the Light, Interior — Photo: Bujatt, via Wikimedia Commons (CC BY-SA 2.5)
4. A Gion Street — Photo: lumoplank, via Wikimedia Commons (CCo)
5. Himeji Castle — Photo: Gilles Desjardins, via Wikimedia Commons (CC BY-SA 4.0)
6. Himeji Castle Across the Moat — Photo: Martin Falbisoner, via Wikimedia Commons (CC BY-SA 4.0)
7. Horyu-ji, Ikaruga — Photo: ONO Masanobu, via Wikimedia Commons (CCo)
8. Approach to the Inner Shrine, Ise — Photo: z tanuki, via Wikimedia Commons (CC BY 3.0)
9. The Torii at Ise — Photo: Raita, via Wikimedia Commons (CC BY 2.0)
10. The Torii at Itsukushima — Photo: Balon Greyjoy, via Wikimedia Commons (CCo)
11. Inside the Kanazawa Museum — Photo: Keemz, via Wikimedia Commons (CC BY 2.0)
12. The Garden at Katsura Imperial Villa — Photo: Odd Roar Aalborg, via Wikimedia Commons (CC BY-SA 4.0)
13. The Garden Pond at Katsura — Photo: Renehaas, via Wikimedia Commons (CC BY-SA 4.0)
14. Stone Basin in the Katsura Garden — Photo: Renehaas, via Wikimedia Commons (CC BY-SA 4.0)
15. Winter Rope-Work at Kenrokuen — Photo: Winniepix, via Wikimedia Commons (CC BY 2.0)
16. The Stage at Kiyomizu-dera — Photo: Martin Falbisoner, via Wikimedia Commons (CC BY-SA 4.0)
17. The Sony Tower, Ginza — Photo: Bigjap, via Wikimedia Commons (CCo)
18. A Machiya Facade, Kyoto — Photo: Basile Morin, via Wikimedia Commons (CC BY-SA 4.0)
19. Gion at Night — Photo: lumoplank, via Wikimedia Commons (CCo)
20. Matsumoto Castle — Photo: Lightning toothed whale, via Wikimedia Commons (CC BY-SA 4.0)
21. Roof Tiles at Matsumoto Castle — Photo: DimiTalen, via Wikimedia Commons (CCo)
22. The Nakagin Capsule Tower, 2019 — Photo: Svetlov Artem, via Wikimedia Commons (CCo)
23. The Garden at the Nezu Museum — Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0)
24. The Dry Garden at Ryoan-ji — Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0)
25. A Gassho Farmhouse, Shirakawa-go — Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0)
26. The Post-and-Beam Frame — Photo: lumoplank, via Wikimedia Commons (CCo)
27. The Garden as a Room — Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0)
28. The Deep Eave and the Roof — Photo: Reggaeman, via Wikimedia Commons (Public domain)
29. The Sliding Screen Wall — Photo: Benh LIEU SONG from Torcy, France, via Wikimedia Commons (CC BY-SA 2.0)
30. The Threshold Sequence — Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0)
31. Inside the Paper Church, Kobe — Photo: Bujdosó Attila, via Wikimedia Commons (CC BY-SA 2.5)
32. A Tatami Room Opening to a Garden — Photo: lumoplank, via Wikimedia Commons (CCo)
33. A Tatami Room and Tokonoma — Photo: Benh LIEU SONG from Torcy, France, via Wikimedia Commons (CC BY-SA 2.0)
34. The Joan Tea House — Photo: Lombroso, via Wikimedia Commons (Public domain)
35. The Great Buddha Hall, Todai-ji — Photo: Cun Cun, via Wikimedia Commons (CC BY-SA 4.0)
36. The Great Buddha, Todai-ji — Photo: Zairon, via Wikimedia Commons (CC BY 4.0)
37. Tokyo Station, Marunouchi — Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0)
38. Tokyo Station Plaza — Photo: Basile Morin, via Wikimedia Commons (CC BY-SA 4.0)
39. The First Gymnasium, Yoyogi — Photo: Rsl421, via Wikimedia Commons (CC BY-SA 3.0)

Introduction

The first thing to understand about Japanese architecture is that it is a carpenter's architecture before it is an architect's. In the stone traditions of Europe and the brick traditions of China, the designer draws and the mason builds; in Japan, the master carpenter designed, cut and raised the building, and the knowledge lived in his hands, his tools and his apprentices rather than in drawings. The great temples and castles were not built from complete plans in the modern sense but from a module — the ken, the bay between two posts — and a set of proportions, joints and details that a carpenter could carry in his head and adapt to any site. That is why Japanese buildings look so consistent across a thousand years and so different from everything around them: the system, not the individual building, is the work of art, and every building is one performance of it.

The second thing is that Japanese architecture does not draw the lines that Western architecture draws. Between inside and outside there is the engawa, a veranda that is neither room nor garden; between one room and the next there is a sliding screen that can be open, closed or removed; between the house and the street there is a lattice that lets the merchant see out while the passer-by sees only shadow. The garden is not decoration attached to a building but a room of the building, entered by stepping stones and framed by a window as carefully as a painting is framed. A Japanese building is therefore best understood as a sequence — gate, path, threshold, room, garden — rather than as an object, and this book follows that sequence wherever it leads, from the approach to Ise to the stroll garden at Katsura to the capsule corridor at Nakagin.

The third thing is that this is a history of rebuilding as much as of building. Ise has been rebuilt every twenty years for well over a millennium; Todai-ji's Great Buddha Hall has burned and been rebuilt twice; Himeji was stripped to its frame and restored in the 2010s; the Nakagin Capsule Tower, designed to be renewed capsule by capsule, was demolished whole in 2022 because its capsules were never replaced. A tradition that rebuilds cannot be judged by Western ideas of original fabric, and this book does not try. Instead it asks, at each building, what was kept and what was changed, who decided, and what the rebuilding meant — because in Japan, the act of rebuilding is often the architecture's real subject.

A word on evidence. The early centuries are thinly documented: temple foundation dates rest on chronicles written centuries later, the oldest surviving wooden buildings are dated by a mix of inscription, style and, increasingly, dendrochronology, and the famous stories — that Horyu-ji's pagoda is the oldest wooden building in the world, that Katsura was the model for modernism — are claims to be weighed, not facts to be repeated. Where the evidence is contested, this book says so. Where a photograph shows something other than its label suggests — a garden detail rather than a villa, a tower interior rather than an exterior — the caption says so too. The aim is not to make Japanese architecture simpler than it is, but to give the reader the tools to see it clearly: the five signs, the glossary, the gazetteer, and the habit of looking at a joint, a threshold and a roof before anything else.

PART I

Timber and the Sacred

The first five chapters lay the ground: the timber tradition and its module, the shrines of Shinto and the temples of Buddhism, the castles of the samurai age and the merchant townhouses of Kyoto — building as craft, as ritual and as power.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

I

The Timber Tradition: Joinery, Modules, and the Post-and-Beam House

*A Carpenter's Architecture**The Ken and the Tatami Module**Joints Without Nails**The Roof, the Eave, and the Bracket**The House, the Floor, and the Climate*



Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AShirakawa_Gassho-zukuri14.jpg

A Carpenter's Architecture

Walk into any old Japanese building and the first thing you notice is that the building is showing you how it was made. The posts stand in the open, their grain visible; the beams cross them in the open, their ends visible; the brackets that carry the roof spread above your head like the branches of a tree. Nothing is hidden behind plaster or panelling in the way a Western building hides its structure, because in Japan the structure is the architecture. The master carpenter, the daiku, was designer, engineer and builder in one, and his knowledge was not written in pattern books but carried in his tools, his templates and the hands of his apprentices. A temple, a castle keep and a farmhouse differ in scale and finish, but they share one system, and to understand that system is to understand Japanese architecture whole.

That system begins with the tree. Japan is a forested archipelago, and its builders worked in cedar and cypress that could be grown straight, split cleanly and cut into long, true timbers. A post was not a sawn stick but a selected trunk, its grain read like a text, and the carpenter's first skill was choosing: which tree for a post, which for a beam, which for a bracket arm that must carry weight and still look light. The timber was used green or seasoned according to the joint, and the building was raised by a community — the frame assembled on the ground, lifted by ropes and levers, and locked together by joints that could be taken apart again. A Japanese building was never quite finished, because its parts were made to be repaired, replaced and renewed, and that reparability is the secret of its long life.

The Ken and the Tatami Module

If the carpenter is the author of Japanese architecture, the module is its grammar. The basic unit is the ken, the distance between two posts, traditionally about six feet, though the exact measure varied by region and period — the Kyoto ken and the Edo ken are not the same, a fact that still trips up restorers. Rooms, houses and temples are counted in ken, and the plan of a building can be read as a grid of bays: three ken by five, five by seven, and so on. The module does two things at once. It gives the carpenter a way to design without drawings, because a building is a multiple of its bays, and it gives the building its rhythm, because the regular beat of posts is what the eye follows along a temple corridor or a townhouse front.

Inside the frame, the measure changes to the tatami mat. A mat is roughly one metre by two, and a room is described by its mat count: four and a half mats for a tea house, six for a bedroom, eight for a reception room. The mat is not only a floor covering but a unit of social space — one mat for one seated person, the tokonoma alcove taking the place of a mat, the hearth or the desk bay measured against it. Because the frame and the mat are related — a ken bay holds two mats side by side — the whole building, from its post spacing to its furniture, belongs to one system of measure. Walk across a tatami floor and you are walking on the building's ruler, and the proportions you feel underfoot are the proportions the carpenter designed by.



Photo: Benh LIEU SONG from Torcy, France, via Wikimedia Commons (CC BY-SA 2.0). Source: https://commons.wikimedia.org/wiki/File%3ATatami_Alcove_%2845063444665%29.jpg

Joints Without Nails

The most celebrated skill of the Japanese carpenter is the joint. Posts meet beams, beams meet brackets, brackets meet purlins, all locked by mortise and tenon, by dovetails, by splices with names as specific as the joints themselves — tsugite for lengthening a timber, shiguchi for joining at an angle — cut so precisely that a joint can be driven home with a mallet and, if needed, driven apart again. Iron nails were known and used, particularly for roof tiles and fittings, but the frame itself relies on wood holding wood, and the joint's precision is what lets a timber building flex in an earthquake rather than break. A joint that can move a little, and return, is worth more than a joint that cannot move at all, and Japanese carpentry is, at bottom, an earthquake technology disguised as craft.

The joint also explains the look of Japanese buildings. Because the frame is joined rather than nailed, its members must be substantial — a post cannot be thin if it must carry a mortise — and because the members are substantial, they are left visible, and because they are visible, they are finished with care. The bracket complex under a temple eave, the *tokyo*, is the joint made monumental: a stack of arms stepping outward from the post to carry a roof that overhangs far beyond the wall. What begins as structure ends as ornament, not because ornament was applied but because structure, well made, is beautiful. The Western visitor who admires the bracket work of Horyu-ji or Todai-ji is admiring, whether they know it or not, a joint.

The Roof, the Eave, and the Bracket

If the frame is the body of a Japanese building, the roof is its head, and a disproportionately large one. Japanese roofs are heavy, deep-eaved and dominant, because they must shed rain in a wet climate, carry snow in the mountains, and shade the interior in summer. The roof's weight is carried not by the walls but by the frame and the bracket arms, so the eaves can reach far beyond the walls, throwing the veranda into shade and the walls into shadow. That deep shadow is the building's climate control: in summer the sun never reaches the paper screens, and in winter the low sun slips beneath the eave into the room. The roof is not a lid but a climate machine, and its size is the price of comfort in a country of rain, snow and summer heat.

Roof materials tell the building's rank and region. The great temples and castles are tiled, their grey *kawara* tiles laid in courses with rounded ends, their ridges capped with ornaments that mark the building's status. The farmhouses of the snowy mountains are thatched, their steep roofs shedding snow and sheltering silkworms in the attic, as at Shirakawa-go. The shrines of Ise are barked, their cypress-bark roofs renewed

with the rest of the shrine every twenty years. The tea house is often thatched or barked at a small scale, its roof deliberately rustic. To read a Japanese roof is to read a map: tile for the city and the castle, thatch for the village, bark for the shrine, each material honest about its place and its cost.



Photo: DimiTalen, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AInui_Kotenshu_roof_details_seen_from_the_Dai-Tenshu%2C_Matsumoto_Castle%2C_2016.jpg

The House, the Floor, and the Climate

The Japanese house begins, literally, from the ground up — or rather, above it. The timber floor is raised on posts over stone footings, so that air circulates beneath, damp is kept from the wood, and the floor can be taken up and replaced. That raised floor sets the house's whole etiquette: shoes come off at the step, the floor is the furniture, and sitting, sleeping and eating all happen at floor level on tatami. The raised floor also sets the house's relationship to the garden, because the veranda, the engawa, runs at floor level around the house, and stepping from the room to the veranda to the garden is a matter of sliding a screen, not of opening a door and going down steps. Inside and outside are levels of one floor, not separate worlds.

The house's second climate device is its openness. Walls are screens — shoji of paper for light, fusuma of opaque paper for privacy, wooden rain shutters for storms — and the house can be opened to the breeze in summer and closed to the cold in winter, its rooms joined or divided as the season demands. There is no corridor in the Western sense, because rooms connect directly, and no fixed furniture, because a room's use changes with the screens and the mats. This flexibility is the house's genius and its limitation: it is superb in a mild climate and draughty in a cold one, and the modern Japanese house, with its insulation and its fixed rooms, is in many ways a negotiation between this open tradition and the demands of winter, privacy and the nuclear family. The tradition survives most completely where it is least compromised — in temples, villas and tea houses, which is why this book keeps returning to them.



Photo: lumoplank, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3ATakayama%2C_Part_II_-_Takayama6392.jpg

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

II

Shinto Shrines: Ise and the Rebuilt Sacred

The Shrine Before the Temple

Ise: Permanence by Rebuilding

Torii, Forest, and Gravel

Itsukushima: The Shrine in the Sea

What the Shrine Teaches



Photo: Raita, via Wikimedia Commons (CC BY 2.0). Source: https://commons.wikimedia.org/wiki/File%3Aise_Grand_Shrine%2C_Mie_Prefecture%3B_November_2016_%2801%29.jpg

The Shrine Before the Temple

Before Buddhism arrived in Japan in the sixth century, the archipelago's sacred architecture was already old, and it was not architecture in the temple sense at all. A sacred place was a grove, a rock, a waterfall, a mountain — a place where the kami, the spirits or presences of Shinto, were felt — marked, not built, by a rope, a fence, a gate. The earliest shrines were enclosures rather than buildings: a fenced clearing with a simple structure at its heart, raised on posts like a storehouse, its roof of bark or thatch, its timber unpainted. That storehouse form, the granary raised above damp and vermin, is the ancestor of the shrine, and it explains the shrine's most distinctive feature: it looks like a building for keeping something precious, because that is what it is — a house for a kami, not a hall for a congregation.

Shinto has no congregation in the Western sense and no liturgy that requires a great interior, so the shrine does not need a hall. What it needs is a precinct — a sequence of courts, fences, gates and gravel, leading the visitor from the ordinary world to the sacred one — and a sanctuary at its heart that is rarely entered and never photographed from within. The architecture is therefore the approach as much as the building: the torii gate that marks the threshold, the bridge over water, the gravel court that crunches underfoot, the forest that darkens around the path. To visit a shrine is to walk a choreography, and the buildings are the punctuation of that walk, not its destination. Ise, the greatest of all shrines, is the purest example, and also the strangest, because its buildings are the newest old buildings in Japan.

Ise: Permanence by Rebuilding

The Grand Shrine of Ise, in Mie Prefecture, enshrines Amaterasu, the sun goddess and ancestress of the imperial line, and it has been rebuilt, by tradition, every twenty years for well over a thousand years. The cycle, called shikinen sengu, works like this: on a plot beside the standing shrine, an exact copy is built in fresh Japanese cypress, using the same tools, joints and rituals; the sacred objects are transferred in a night ceremony; the old shrine is dismantled, and its timbers are distributed to other shrines for reuse. The most recent rebuilding was in 2013, the sixty-second in the recorded cycle, and the next is due in 2033. Nothing at Ise is old in the Western sense — the timber is at most twenty years old — and yet Ise is the oldest continuously maintained architectural tradition in Japan, because what is preserved is not the material but the form, the craft and the ritual.

That fact divides opinion, and this book flags the debate honestly. To a Western conservationist, trained to value original fabric, Ise can look like a replica, and the question is asked, in good faith, whether a building rebuilt sixty times is still the same building. To the shrine's own tradition, the question misses the point: the shrine is a living ritual, and its renewal is the ritual, the craft kept alive by practising it rather than by preserving its products. The philosopher's version of the puzzle — the ship whose every plank has been replaced — is not a puzzle at Ise but a programme. The honest position is to hold both views at once: Ise is not authentic by the standards of the Venice Charter, and it is the most authentic survival of a building craft anywhere, because the craft itself, not its output, is what has survived. The visitor who understands that will see Ise differently from the visitor who only looks for old wood.



Photo: z tanuki, via Wikimedia Commons (CC BY 3.0). Source:
https://commons.wikimedia.org/wiki/File%3Aise_grand_shrine_Naiku_%2C_%E4%BC%8A%E5%8B%A2%E7%A5%9E%E5%AE%AE_%E5%86%85%E5%AE%AE_-panoramio_%281%29.jpg

Torii, Forest, and Gravel

The shrine's elements are few and exact. The torii, two posts and two crossbeams, marks the boundary between the ordinary and the sacred, and its form varies with the shrine: plain unpainted cypress at Ise, vermilion lacquer at Itsukushima and at the thousands of Inari shrines. The torii is not a door — it has no leaves — but a frame for passing through, and passing through it is the first act of worship. The approach continues over gravel, whose sound underfoot is part of the ritual, past lanterns and subsidiary shrines, through fences that screen the sanctuary from casual view. The forest matters as much as the buildings: at Ise, the shrine stands in a sacred forest of cryptomeria, tended as carefully as the buildings, because the kami are of the place, not merely housed in it.

The sanctuary itself follows the storehouse form: a rectangular building raised on posts, its floor above the ground, its roof of cypress bark with crossed gable ornaments, the chigi, and horizontal logs, the katsuogi, along its ridge. The chigi and katsuogi began as structural — the crossed poles binding the roof, the logs weighting it against wind — and became, over centuries, the shrine's signature, their number and cut marking the shrine's rank. The building is unpainted, its cypress weathering to silver-grey, and its beauty is the beauty of plain timber well joined. The contrast with the Buddhist temple could hardly be sharper: where the temple is painted, sculptured and grand, the shrine is plain, small and hidden, and its power lies in what it withholds.



Photo: Balon Greyjoy, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3A20181111_Itsukushima_Shrine_torii-1.jpg

Itsukushima: The Shrine in the Sea

If Ise is the shrine as forest and renewal, Itsukushima, on the island of Miyajima, is the shrine as theatre. Its great vermilion torii stands in the sea, so that at high tide the shrine seems to float, and the approach is by water as much as by land. The shrine's corridors are built on piles over the tidal flats, its halls connected by covered walkways, its stage for sacred dance jutting over the water. The effect is deliberate: the island itself is sacred, and the shrine does not sit on the island so much as hover at its edge, between land and sea, as the kami themselves hover between worlds. The vermilion, which at Ise would be unthinkable, is here the point — colour as a signal across water, visible from the mainland and from approaching boats.

Itsukushima also shows how shrine architecture absorbs history without losing its form. The present buildings date largely from the sixteenth century, rebuilt by the warlord Toyotomi Hideyoshi's patronage and restored repeatedly since, and the shrine's fame has made it one of Japan's most visited sites, its torii photographed more than any other gate in the country. That fame is a preservation problem in itself: the shrine must serve millions of visitors while remaining a sacred place, and its managers balance access, ritual and conservation in full view. The visitor who arrives by ferry, walks the corridors over the water and watches the tide return beneath the torii is experiencing the shrine as it was designed to be experienced — from the sea, at the mercy of the tide, and in colour.

What the Shrine Teaches

The shrine tradition teaches three lessons that run through the whole of Japanese architecture. The first is that a building can be a sequence rather than an object: the torii, the gravel, the forest and the fence are as much the architecture as the sanctuary, and a shrine visited only for its main hall has been half visited. The second is that plainness can be a choice, not a poverty: the unpainted cypress, the bark roof and the gravel court are a deliberate aesthetic, refined over centuries, and they stand as a permanent counter-argument to the idea that richness requires ornament. The third is that renewal can be preservation: a craft kept alive by rebuilding preserves more, in the long run, than a building kept untouched until its craft is forgotten and its timbers rot beyond repair.

Those lessons explain why the shrine tradition, though it produced few large buildings, shaped everything that followed. The tea house borrows the shrine's plainness and its garden path; the villa borrows its raised floor and its bark roof; the modern masters, from Tange to Kuma, return to its timber, its thresholds and its forest whenever they want to say what is Japanese in their work. The shrine is the root of the tradition, and

like a root, it is mostly out of sight — which is why this book begins with it, and why the visitor who has walked to Ise, or even to a local shrine at dusk, will recognise its logic in every building that follows.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

III

Buddhist Temples: Horyu-ji to Todai-ji

A New Religion, a New Architecture

Horyu-ji: The Oldest Wood in the World?

Todai-ji: The Great Buddha Hall

The Pagoda and the Central Pillar

Kiyomizu and the Temple in the Landscape



Photo: ONO Masanobu, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AHoryu-ji_Kondo_and_Five-story_Pagoda_2022.jpg

A New Religion, a New Architecture

Buddhism arrived in Japan from Korea in the sixth century, and with it came a completely new architecture: the temple, with its halls, pagodas, gates and monastic quarters, laid out on a continental plan and built to house images, scriptures and a community of monks. Where the shrine was a small storehouse in a forest clearing, the temple was a city in miniature, its buildings arranged along axes and courts, its halls large enough for congregations, its pagodas rising as landmarks over the plain. The temple builders adapted the Chinese and Korean models to Japanese timber craft, and the result — the bracketed eave, the tiled roof, the painted hall — became the grand manner of Japanese architecture, the style against which the shrine's plainness and the tea house's rusticity define themselves.

The early temples were state projects. Prince Shotoku, regent in the early seventh century, founded Horyu-ji and championed Buddhism as the religion of the court; a century later, Emperor Shomu built Todai-ji as the centre of a national network of state temples, its Great Buddha a statement that the emperor's authority and the Buddha's law were one. Temple building was therefore political as well as religious, and the scale of the great temples — the largest wooden buildings ever raised in Japan — was a measure of state power. That political charge never quite left the temple: to build a great hall was to claim legitimacy, and to burn one, as warlords repeatedly did, was to deny it.

Horyu-ji: The Oldest Wood in the World?

Horyu-ji, at Ikaruga near Nara, is the most famous temple in Japan, and its fame rests on a claim that this book states carefully: its golden hall, the kondo, and its five-storey pagoda are among the oldest wooden buildings in the world. The temple was founded, by tradition, in 607 by Prince Shotoku, but the buildings standing today are generally dated by scholars to the late seventh century, after a fire in 670 destroyed the original complex and it was rebuilt. That distinction matters. The pagoda is not, as popular accounts sometimes imply, a seventh-century building untouched since 607; it is a late seventh-century rebuilding, restored many times since, whose timbers include some of the oldest wood in any standing building, but whose present form is the product of centuries of repair. The claim that Horyu-ji holds the world's oldest wooden buildings is therefore true in the sense that matters — no older timber structures survive in use — and misleading if it suggests a building frozen in 607.

What makes Horyu-ji extraordinary is not a single date but the completeness of its survival. The kondo and pagoda stand in their original asymmetrical layout, the pagoda to the west and the hall to the east, a plan that later temples regularised into symmetry. The kondo's interior holds some of Japan's oldest Buddhist sculpture, and the temple's treasure house holds objects from the seventh century onward, a continuous record of Japanese art. The bracket work, the cloud-pattern carvings and the proportions of the pagoda — each storey smaller than the one below, the whole tapering like a tree — set the standard for Japanese temple building, and every later pagoda, from Kyoto's Yasaka to Nara's Kofuku-ji, is measured against Horyu-ji's. To stand in its courtyard is to stand at the beginning of the tradition, and to understand why the Japanese regard timber, properly joined and repeatedly repaired, as permanent enough.

Todai-ji: The Great Buddha Hall

If Horyu-ji is the tradition's beginning, Todai-ji is its summit. The temple was founded by Emperor Shomu in the eighth century as the head temple of a national system, and its Great Buddha, a bronze figure some fifteen metres high, was dedicated in 752 in a ceremony attended by the court and by emissaries from across Asia. The hall built to house it was the largest wooden building in Japan, and it burned twice — in 1180 in war, and again in 1567 — and was rebuilt twice, the present hall dating from 1709. The 1709 hall is smaller than the original, roughly two-thirds of its width, and yet it remains one of the largest wooden buildings in the world, its great tiled roof spanning a timber frame of colossal posts and brackets that still astonishes visitors who walk beneath it.

The Great Buddha Hall teaches a different lesson from Horyu-ji: the lesson of scale and of loss. The original hall's size was a political statement, and its reduction in 1709 was an economic one — the rebuilt hall is what a poorer, later age could afford, and its grandeur is the grandeur of a ruin honestly rebuilt rather than a replica. The hall's interior, with the Great Buddha seated among attendant figures and a pillar through which, by tradition, visitors squeeze for good fortune, is a working temple, not a museum, and its monks still perform the daily rites. The visitor who understands Todai-ji understands that Japanese monumentality is not about stone permanence but about timber ambition — the willingness to raise a wooden roof over a space that stone builders would have vaulted, and to accept that it will burn and be raised again.



Photo: Cun Cun, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File:%3AAT%C5%8Ddai-ji_Daibutsuden%2C_June_2019.jpg

The Pagoda and the Central Pillar

The pagoda deserves a chapter of its own, because it is the most misunderstood Japanese building. Derived from the Indian stupa, the relic mound, it became in China a multi-storey tower and in Japan a timber structure of extraordinary sophistication: a central pillar, the *shinbashira*, rising through the tower, surrounded by storeys that are structurally independent of one another, each storey a separate small building stacked on the last. The pagoda's silhouette — the tapering profile, the upturned eaves, the finial, the *soarin*, rising like a spire — is the most recognisable shape in Japanese architecture, and its survival through earthquakes has made it a legend. The popular story is that the *shinbashira* acts as a damper, swaying independently and steadying the tower, and that story is repeated in guidebooks around the world.

The honest version is more interesting. Modern engineering studies have shown that the *shinbashira*'s role is subtler than the legend: in many pagodas the central pillar does not carry the structure at all, but hangs or stands independently, and the tower's earthquake resistance comes from the flexibility of its joints, the independence of its storeys and the friction of its timber connections, not from a single magic pillar. Some engineers argue the pillar helps; others argue it is largely symbolic, a relic of the stupa's relic chamber. This book flags the debate rather than settling it, because the pagoda's real lesson is not a single device but a system: a tall timber building that survives earthquakes not by being rigid but by being loose, its parts moving a little and returning, like the joints of the carpenter's frame at a larger scale. That principle — flexibility over rigidity — runs from the pagoda to the modern base-isolated tower, and it is Japan's great structural gift to the world.



Photo: Zairon, via Wikimedia Commons (CC BY 4.0). Source: https://commons.wikimedia.org/wiki/File%3ANara_Todai-ji_Daibutsuden_Interior_Daibutsu_04.jpg

Kiyomizu and the Temple in the Landscape

The later temples show the tradition loosening its continental geometry and settling into the Japanese landscape. Kiyomizu-dera, on the eastern hills of Kyoto, is the great example: its main hall stands on a timber stage thrust out over the hillside, supported by a forest of posts and brackets, so that worshippers stand above the maple trees and look out over the city. The stage is not a platform for viewing in the modern tourist sense, though it is now famous for that; it is the temple's way of occupying a slope that could not be levelled, turning a topographical problem into the building's most famous feature. The temple's pagoda, its halls and its waterfall, the Otowa spring that gives the temple its name, are composed as a walk through the hillside, a pilgrimage in miniature.

Kiyomizu-dera, like Horyu-ji and Todai-ji, has burned and been rebuilt, most recently in the seventeenth century, and its present buildings are early modern rather than ancient — a fact that surprises visitors who expect antiquity and find, instead, a living temple of the Edo period, painted, maintained and crowded. That is the temple tradition's normal condition: not a frozen antiquity but a continuity of use, repair and renewal, in which the seventeenth century is as much a part of the story as the eighth. The temple, like the shrine, teaches that in Japan, a building's age is measured less by its timbers than by its continuous life, and that a temple still used for worship, weddings and festivals is more alive, and therefore more authentic in the sense that matters, than a ruin preserved behind glass.



Photo: Martin Falbisoner, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AKiyomizu-dera%2C_Kyoto%2C_November_2016_-_01.jpg

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

IV

Castles and Samurai Architecture: Himeji and Matsumoto

*From Fortress to Palace**Himeji: The White Heron**Matsumoto: The Crow Castle**Stone, Plaster, and Tile**The Castle Town and Its Legacy*



Photo: Gilles Desjardins, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AHimeji_Castle_Japan.jpg

From Fortress to Palace

The Japanese castle begins as a fortress and ends as a palace, and the castles that survive show both characters at once. In the age of civil war, the sixteenth century, castles were mountain strongholds of earth, timber and stone, built for defence on ridges and peaks. With unification under Oda Nobunaga, Toyotomi Hideyoshi and the Tokugawa shoguns, the castle moved down into the plain, became the centre of a castle town, and acquired the towering keep, the tenshu, that is its symbol — a multi-storey tower of timber and plaster over stone walls, visible for miles, designed as much to impress as to defend. The castle town grew around it in a planned grid, its streets, moats and gates ordered by rank, and the castle became the city: Himeji, Matsumoto and a hundred other Japanese cities are still organised around the castle that founded them.

Only twelve castles keep their original keeps, the rest having been demolished in the Meiji period, burned in war or lost to fire, and the survivors are therefore precious — not only as buildings but as evidence of a whole system of defence, residence and display. A castle is not a single tower but a complex: the main keep and its subsidiary keeps connected by corridors and turrets, the baileys, the kuruwa, arranged in depth so that an attacker must pass gate after gate, wall after wall, each turn exposed to fire from above. The stone walls, built without mortar from fitted stones, slope inward as they rise, and their great foundation stones, some weighing many tons, were dragged into place by teams of labourers whose work is still visible in the chisel marks. The castle is, in short, a small city of timber, plaster and stone, and its keep is only its crown.

Himeji: The White Heron

Himeji Castle, in Hyogo Prefecture, is the finest surviving Japanese castle and the one against which all others are judged. Its keep complex, completed in 1609, rises over white-plastered walls, its tiered roofs and gables composing a silhouette that has earned it the name White Heron, shirasagi — the castle seems, from a distance, to take flight. The white is not paint but plaster, renewed repeatedly, and the castle's beauty is the beauty of that plaster against grey tile and stone: a fortress that chose to look like a bird. Inside, the keep is a different experience — steep stairs, low ceilings, dark timber, gun loops and stone-drop chutes, the whole apparatus of defence preserved in its original timber, so that the visitor climbs through a working fortress, not a museum reconstruction.

Himeji's recent history is a lesson in restoration. From 2009 to 2015 the castle was stripped to its frame, its plaster renewed, its tiles replaced and its timbers repaired, and when the scaffolding came down, the castle was startlingly white — whiter, some visitors said, than they remembered, and the restoration was debated in the press as too bright, too new. That debate is the Ise debate in another form: a building whose beauty depends on white plaster must be replastered to survive, and replastered plaster is, by definition, new. The castle's managers accepted the criticism and the castle has since weathered toward its familiar grey-white, but the episode is worth remembering, because it shows that restoration is always an interpretation, and that the public's memory of a building — its weathered, photographed self — is itself a kind of heritage that restoration disturbs. Himeji today is both a 1609 castle and a 2015 restoration, and it is honest to say both at once.



Photo: Martin Falbisoner, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AHimeji_Castle%2C_November_2016_-02.jpg

Matsumoto: The Crow Castle

Matsumoto Castle, in Nagano Prefecture, is Himeji's dark counterpart, and the pairing is instructive. Where Himeji is white, Matsumoto is black — its plaster darkened, its trim white, its keep rising over its moat in a silhouette that has earned it the name Crow Castle. The keep, built at the end of the sixteenth century, is one of the oldest surviving, and its six storeys — five visible from outside, six inside, the hidden storey a defensive trick — contain the same apparatus as Himeji's: steep stairs, low beams, gun racks and a moon-viewing turret added in peacetime, when the castle's military function had given way to display. That turret, with its vermilion balustrade and its view over the moat, is the castle's biography in miniature: fortress first, palace second, pleasure house third.

Matsumoto also shows the castle's relationship to its landscape. The castle stands on flat land, not a hill, its moat fed by the rivers of the Matsumoto plain, its stone walls rising directly from the water so that the keep seems to float. The effect is deliberate: a castle on a plain must create its own height and its own water, and Matsumoto's builders did both, turning a flat site into a defensible island. The castle's survival is itself a story — it was nearly demolished in the Meiji period, saved by local citizens who bought it back, and restored in the twentieth century — and that civic rescue is part of why it stands today. The visitor who crosses its bridges, climbs its stairs and looks from its top storey over the plain is seeing not only a samurai fortress but a town's decision to keep its past.



Photo: Lightning toothed whale, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AMatsumoto_Castle_Keep_Tower.jpg

Stone, Plaster, and Tile

The castle's materials are a study in contrast. The stone walls, the *ishigaki*, are built of unworked or roughly dressed stones fitted without mortar, their faces sloped and curved — the fan slope, *ogi*, that is both beautiful and defensive, since it cannot be climbed easily and it sheds attackers' ladders. The great corner stones, the *sumi-ishi*, are cut to lock the wall's angles, and the walls' drainage, through gaps and channels, is as carefully designed as their masonry. Above the stone, the timber frame rises, its walls plastered white or black, its windows small and shuttered, its roofs tiled in grey *kawara* with ridge ornaments, the *shachihoko* — mythical carp-tigers — guarding the keep's gables against fire. Each material does one job: stone resists, timber flexes, plaster seals, tile sheds.

The roof tiles deserve a closer look, because they are the castle's most numerous and most overlooked feature. A castle roof carries thousands of tiles, each laid by hand, each overlapping its neighbour, their weight pressing the roof frame into stability and their grey surfaces composing, from below, a texture as fine as any textile. Seen from a tower window, as in the photograph in this book, the tiles resolve into a pattern of ridges and valleys, a roofscape that is itself a landscape. The tiles' colour — grey, not the red of Mediterranean roofs — is the colour of the castle's restraint, and the white plaster and grey tile together are the palette of the samurai age: sober, disciplined and, at Himeji's scale, unexpectedly beautiful.



Photo: DimiTalen, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AInui_Kotenshu_roof_details_seen_from_the_Dai-Tenshu%2C_Matsumoto_Castle%2C_2016.jpg

The Castle Town and Its Legacy

The castle's greatest legacy is not the keep but the town. The castle town, jokamachi, was planned around the castle in rings of status: samurai residences near the castle, merchants on the main streets, temples on the edges, each district with its own character and its own building type. The merchant streets survive, in places, as the machiya districts of the next chapter; the samurai districts survive as quiet streets of walls and gates; the castle itself survives, where it survives, as the town's centre and its symbol. Even where the castle is gone, its moats, its street plan and its place names remain, and Japanese cities still orient themselves by their castles in a way that European cities orient themselves by their cathedrals.

The castle's afterlife is also a caution. The Meiji government, seeing castles as symbols of feudalism, ordered many demolished, and only local protest, military use or sheer remoteness saved the twelve that remain. The Second World War destroyed others, including the great keep at Nagoya, later rebuilt in concrete. The concrete reconstructions that now crown many Japanese cities — Osaka, Nagoya, Hiroshima — are museums with elevators, useful and popular, but they are not the timber castles, and this book distinguishes them carefully: a concrete keep is a monument to a castle, not a castle. The twelve originals, Himeji and Matsumoto chief among them, are the real evidence, and they are worth the journey precisely because they are the exception, not the rule.

V

Machiya Townhouses and the Merchant City: Kyoto

The Merchant's House

Gion and the Streets of Kyoto

Inside the Machiya: Shop, Room, Garden

Preservation and the Machiya Today

The Merchant City as a Whole



Photo: Basile Morin, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AFacade_of_a_dwelling_with_sudare%2C_wooden_balustrades_and_yellow_lamp%2C_Shinbashi-dori%2C_Gion%2C_Kyoto%2C_Japan.jpg

The Merchant's House

If the castle is the samurai's architecture and the temple the monk's, the machiya is the merchant's — and it is the most humane building in the Japanese tradition. A machiya is a townhouse: a narrow frontage on the street, often only five or six metres wide, and a deep plan stretching back through shop, living rooms and workshops to a small courtyard garden, the tsubo-niwa, at the rear. The front is the shop, its timber lattice, the koshi, screening the interior while letting the merchant see the street; behind the shop are the living rooms, tatami-floored and screen-divided; behind them, the kitchen and the storehouse, the kura, fireproofed in plaster. The whole is timber, plaster and tile, two storeys high, its roof tiled and its eaves low over the street.

The machiya's narrow frontage is not an aesthetic choice but a fiscal one: in the Edo period, houses were taxed on their street frontage, so merchants built narrow and deep, and the deep plan became a virtue — a sequence of rooms and gardens, each with its own light, the house unfolding like a scroll as you walk through it. The lattice front is similarly practical and social: it advertises the shop while preserving the household's privacy, it lets air and light in while keeping the street's dust and gaze out, and its pattern — fine or coarse, plain or decorated — signals the shop's trade and status. The machiya is, in short, a building shaped by tax, trade and climate, and its beauty is the beauty of those constraints well answered.

Gion and the Streets of Kyoto

Kyoto is the machiya's great city, because Kyoto was spared the firebombing that destroyed the merchant districts of Tokyo and Osaka, and its central streets still hold hundreds of machiya, concentrated in the preserved districts of Gion, Sannenzaka and the streets around Nishiki Market. Gion, the entertainment district, is the most famous: its machiya, many now restaurants and teahouses, line narrow lanes, their lattices lit at night, their noren curtains marking the entrance, their second-storey windows shuttered in timber. By day Gion is a shopping street; by night, when the lamps come on and the lattices glow, it becomes the merchant city as theatre, and the visitor who walks it at night understands why the machiya's street front is its most important room.

The preserved districts are, however, a fraction of what existed, and this book does not romanticise their survival. Kyoto's machiya have been demolished in large numbers since the postwar period, replaced by apartment blocks, car parks and concrete shops, and the survivors are often preserved because they were converted to restaurants and lodgings, not because they remained houses. The preservation districts protect the street front, but the deep plan behind it — the courtyards, the storehouses, the workshops — is harder to protect, and many a preserved facade hides a rebuilt interior. The honest view is that Gion is both a living district and a stage set, and the visitor should enjoy it as both, while remembering that the machiya as a way of life, not only as a facade, is what is being lost.



Photo: lumoplank, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AStreets_of_Gion%2C_Kyoto_-_Gion7708.jpg

Inside the Machiya: Shop, Room, Garden

Walk through a machiya and the plan reveals itself as a sequence of thresholds. The shop at the front, the mise, is open to the street, its earth floor at street level, its goods displayed behind the lattice. Behind it, a step up to the tatami rooms, the oku, where the family lives, their screens opening to the courtyard garden, the tsubo-niwa, a pocket of sky, stone and planting no larger than a room, that brings light and air into the deep plan. Behind the garden, the kitchen and the storehouse, and sometimes a second garden, so that even a house fifty metres deep is never dark. The tsubo-niwa is the machiya's genius: a garden too small to walk in, designed only to be seen, that makes the deep plan habitable and turns the house's centre into its lungs.

The machiya's interior details are the merchant's version of the villa's refinement: the timber lattice, the plaster walls, the wooden rain shutters, the noren curtain with the shop's crest, the tokonoma in the reception room, the kitchen's earth floor and its well. The materials are plain — cedar, plaster, paper — but the finish is exact, because a merchant's house, like a merchant's goods, was judged by its finish. The machiya's restraint is different from the tea house's: where the tea house is rustic by philosophy, the machiya is plain by economy and by taste, and its elegance lies in the proportion of its lattice, the rhythm of its posts and the quality of its timber, not in ornament. It is the architecture of a class that could not build castles and did not want temples, and it built, instead, the most liveable houses in Japan.



Photo: lumoplank, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AStreets_of_Gion%2C_Kyoto_-_Gion7712.jpg

Preservation and the Machiya Today

The machiya's present is a preservation story with no settled ending. Kyoto's preservation districts, established from the 1970s onward, protect the street fronts and regulate rebuilding, but they cannot compel owners to maintain timber houses that are expensive to repair, difficult to insulate and hard to adapt to modern life. Many owners have sold, and many machiya have become lodgings for tourists — a use that preserves the building while changing its meaning, and that has itself become controversial, as whole streets of lodgings hollow out the neighbourhoods they preserve. The alternative — the machiya as a family house, lived in and maintained — survives, but it requires owners willing to accept draughts, small rooms and high repair bills for the sake of a way of life.

There are hopeful models. Some machiya have been restored as workshops, studios and small museums, their deep plans suiting crafts that need shop, workroom and garden. Some have been adapted as restaurants whose courtyards become dining gardens. And some districts have found a balance, where residents, shopkeepers and visitors share the streets without any one group driving the others out. The lesson of the machiya for the wider tradition is that preservation is not only a technical problem — how to repair timber and plaster — but a social one: a building type survives when people want to live in it, and the machiya's future depends on whether the next generation of Kyoto residents finds its narrow, deep, garden-centred life worth living. That question is still open, and it is the most important one this chapter asks.

The Merchant City as a Whole

Step back from the single house and the merchant city appears as a system: the castle at its centre, the samurai districts around it, the merchant streets on the main roads, the temples on the edges, each part with its building type and its street character. Kyoto's grid, laid out in the eighth century on a Chinese model and still legible in its street names and block sizes, organises that system, and the machiya's narrow frontage is the grid's smallest unit. The merchant city is therefore not a collection of picturesque houses but a planned urbanism, as deliberate as any European new town, and its survival in Kyoto is the survival of a whole urban order, not only of individual buildings.

That urban order is what the next chapters refine. The villa takes the merchant house's timber and garden and makes them aristocratic; the tea house takes its plainness and makes it philosophy; the garden takes its courtyard and makes it landscape. The machiya is the middle term of Japanese architecture — between the castle and the tea house, between the city and the garden — and it is the building type most readers will

actually enter, as a shop, a restaurant or a lodging. Enter it slowly, this book suggests, and notice the sequence: lattice, shop, step, room, garden, storehouse. That sequence, in miniature, is the whole tradition.

PART II

Refinement: Villa, Garden, and Tea

Chapters six to nine turn to the arts of restraint: Katsura and the sukiya ideal, gardens composed as architecture, tea houses and wabi-sabi, and the materials themselves — wood, paper, earth, stone — honestly told.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

VI

Katsura Imperial Villa and the Sukiya Ideal

*A Prince's Villa**Shoin, Sukiya, and the Staggered Plan**Taut, Gropius, and the Modernist Reading**The Tea Houses in the Garden**What Katsura Means Now*



Photo: Odd Roar Aalborg, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AThe_garden_around_the_Katsura_Rikyu_Imperial_Villa_in_Kyoto%2C_Japan.jpg

A Prince's Villa

Katsura Imperial Villa, in western Kyoto, is the most admired building in Japan, and the most argued over. Built in the seventeenth century for Prince Toshihito, brother of the emperor, and extended by his son Toshitada, it is a group of shoin buildings — the Old Shoin, the Middle Shoin and the New Palace — arranged around a large stroll garden, with five tea houses scattered through the garden's landscape. The buildings are timber, plaster and paper, their roofs of bark and tile, their verandas opening to the garden, their interiors of tatami, tokonoma and staggered shelves. The garden is a pond landscape of islands, bridges, pines and lanterns, composed to be walked in a sequence, each turn revealing a new view. The whole — buildings, tea houses and garden as one work — is the sukiya ideal at its fullest: a villa that is also a garden, and a garden that is also a house.

Katsura's history is quieter than its fame. It was a private imperial villa, not a public monument, and it was little known outside court circles until the twentieth century, when it was opened to visitors and, crucially, when it was discovered by modern architects. Its buildings are seventeenth-century, but its fame is twentieth-century, and that gap matters, because much of what is said about Katsura — that it is the essence of Japanese architecture, that it anticipates modernism, that it is the model for the modern house — was said about it by people who needed a model, not by its builders. The villa itself is more modest and more interesting than its legend: a prince's retreat, built for moon-viewing, poetry and tea, whose buildings are refined but not grand, and whose garden is designed for walking, not for display.

Shoin, Sukiya, and the Staggered Plan

Katsura's buildings show the shoin style at its most refined, and the sukiya style at its most deliberate. The shoin is the formal reception architecture of the samurai house: tatami rooms, a tokonoma alcove, staggered shelves, a writing desk bay, and a veranda facing the garden. The sukiya takes that form and loosens it: the timbers are left in their natural state, bark on, knots visible; the ceilings vary in height and material from room to room; the windows are placed not symmetrically but where the view requires; the tea houses in the garden are rustic, their posts of unpeeled logs, their walls of mud plaster, their roofs of thatch. The contrast is the point: formality in the main buildings, rusticity in the tea houses, and the stroll between them as a passage from ceremony to nature.

The plan is famously staggered. The three shoin buildings do not line up but step sideways as they extend toward the garden, so that each room has its own view and its own light, and the veranda runs not in a straight line but in a series of turns, like the garden path it faces. That staggering, which looks accidental, is the villa's great design move: it breaks the symmetry of the Chinese-derived palace plan and replaces it with an asymmetry that follows the landscape. The result is a building that cannot be understood from a single photograph, because its beauty lies in the sequence — the turn of the veranda, the shift of the ceiling, the window that frames a pine at exactly the right height. Katsura must be walked, and that is why it is visited on guided tours, in small groups, at a walking pace.



Photo: Renehaas, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AKatsura_Villa%2C_Kyoto_Tenbashi.jpg

Taut, Gropius, and the Modernist Reading

Katsura's modern fame begins with Bruno Taut, the German modernist who, exiled in Japan in the 1930s, visited the villa in 1933 and proclaimed it a masterpiece of functional, modern architecture — its plain surfaces, its modular plan, its honest materials, its integration with nature, all anticipating, in his view, the modern movement. Walter Gropius, visiting in 1954, agreed, and the villa became, in Western architectural history, the proof that Japanese tradition and modernism were allies, not enemies. That reading shaped the villa's restoration, its photography and its place in textbooks, and it shaped modern architecture too: the post-and-beam house, the open plan, the sliding wall and the garden room of mid-century modernism all owe something to Katsura, as filtered through Taut and Gropius.

The debate, which this book flags honestly, is whether Taut and Gropius saw Katsura or saw themselves in it. Katsura's builders were not functionalists in the modern sense: their plainness was aristocratic taste, not industrial logic; their module was the carpenter's ken, not the factory's standard; their asymmetry was a garden aesthetic, not a rejection of symmetry. The modernist reading is not wrong — Katsura does share qualities with modernism — but it is partial, and it has distorted the villa's history by making it a prophecy rather than a product of its own time. The honest view is that Katsura is both: a seventeenth-century villa of extraordinary refinement, and a twentieth-century mirror in which modern architects recognised their own ideals. The visitor who knows both stories will see the villa more clearly than the visitor who knows only one.

The Tea Houses in the Garden

Scattered through Katsura's garden are five tea houses, each a small essay in rusticity: the Shokintei, the Pine-Lute Pavilion, with its view over the pond; the Shokatei, the Flower-Appreciation Pavilion, on a hill; the Gepparo, the Moon-Wave Pavilion, by the water; and two smaller houses, each placed to be discovered on the walk, not seen from the main buildings. The tea houses are the garden's destinations and its pauses, and their architecture — unpeeled posts, mud walls, low entrances, small windows framing a single pine or a stretch of water — is the tea aesthetic at its most concentrated. They are not miniature versions of the main buildings but a different architecture altogether, built by different rules for a different ritual.

The tea houses also show the garden's design logic. The stroll garden is not a landscape to be looked at but a sequence to be walked, and the tea houses are its stations: each turn of the path, each bridge, each lantern and each stone is placed to prepare the next view, and the tea house,

when it appears, is the view's reward and its frame. The garden's pond, its islands and its shoreline are composed with the same care as a room's tokonoma, and the famous moon-viewing platform at the Shokintei — a veranda extended over the water so that the moon can be seen reflected in the pond — is the garden's most poetic device: architecture as an instrument for looking, not only for living. Katsura's garden is, in the end, the villa's largest room, and its tea houses are its furniture.



Photo: Renehaas, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AKatsura_Villa%2C_Kyoto_%281%29.jpg

What Katsura Means Now

Katsura today is a protected imperial property, visited by guided tour, photographed under strict rules, and maintained by the Imperial Household Agency with a care that matches its fame. That care is itself a subject: the villa's timbers, papers and garden are renewed on a cycle, like Ise's, and the villa that visitors see is a maintained, not an untouched, seventeenth-century building. The photographs in this book are honest about the limits of that access: the garden views are freely photographed, but the villa's interiors are not, and the stone basin in the garden stands here for the tea-garden details that photography can show, while the buildings themselves are described rather than illustrated from within. That limitation is itself instructive: Katsura resists the photograph, because it is a sequence, not an image.

Katsura's meaning for contemporary architecture is undiminished. Whenever an architect today speaks of honest materials, of a house open to its garden, of a plan that follows the landscape rather than imposing on it, Katsura is in the background, whether acknowledged or not. But its deeper meaning is quieter: it shows that refinement does not require grandeur, that a prince's villa can be built of plain wood and paper, and that the highest architecture in Japan has often been the most restrained. The villa's lesson is not a style to copy but a discipline to learn — the discipline of choosing, placing and leaving alone — and that discipline, more than any single building, is Katsura's gift to the tradition.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

VII

Gardens as Architecture: Dry Gardens and Stroll Gardens

The Garden Is a Room

Ryoan-ji: Fifteen Rocks

The Stroll Garden: Kenrokuen and Katsura

The Courtyard Garden and Borrowed Scenery

The Modern Garden: Kuma and the Museum Garden



Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0). Source: <https://commons.wikimedia.org/wiki/File%3ARyoan-ji-Garden-2018.jpg>

The Garden Is a Room

In Japanese architecture, the garden is not the setting of the building but a part of it, and the distinction matters. A Western garden is usually an outdoor space attached to a house, designed to be walked in and looked at from the house; a Japanese garden is designed as a room of the house, with its own walls, floor and ceiling — the walls are fences and hedges, the floor is gravel, moss or water, the ceiling is the sky framed by eaves and branches — and it is composed to be seen from specific seats inside the building, as carefully as a painting is composed for its frame. The garden's designer works like an architect: placing rocks as columns, raking gravel as flooring, planting pines as roof beams, and choreographing the visitor's movement through the space as a sequence of rooms.

That architectural character explains the garden's types. The dry garden, the *karesansui*, is a room without water, its gravel raked into waves, its rocks standing as islands and mountains, designed for contemplation from a veranda, not for walking. The stroll garden, the *kaiyu*, is a landscape to be walked, its pond, islands, bridges and tea houses composed as a journey, each turn revealing a new view. The courtyard garden, the *tsubo-niwa*, is a pocket of nature inside a townhouse, too small to enter, designed only to be seen. Each type answers a different building: the dry garden belongs to the Zen temple, the stroll garden to the villa, the courtyard garden to the merchant house. Together they are the garden tradition's grammar, and this chapter reads them as architecture, not as decoration.

Ryoan-ji: Fifteen Rocks

The dry garden at Ryoan-ji, in Kyoto, is the most famous garden in Japan and the most argued over. It is a rectangle of raked gravel, some thirty metres by ten, enclosed by an earthen wall, containing fifteen rocks in five groups, set in moss on the gravel. No more, no less: fifteen rocks, and from any single viewpoint on the veranda, at least one rock is always hidden by another, so the garden can never be seen whole. The garden dates, in its present form, from the late fifteenth century, and its designer is unknown — attributions to the painter Soami are traditional, not documented — and its meaning is unknown too, which has not stopped centuries of interpretation: the rocks are islands in the sea, mountains rising from mist, a tiger crossing water, the character for heart, or nothing at all.

The honest position, which this book takes, is that Ryoan-ji's meaning is its refusal of meaning. The garden's power lies not in a hidden code but in its discipline: the gravel raked daily, the rocks placed with absolute precision, the wall's weathered clay, the veranda's low viewpoint that makes the visitor sit, look and wait. Zen temples used such gardens as aids to meditation, and the garden's abstraction — no flowers, no water, no colour except the green of moss — is a discipline for the eye, training it to see composition without subject. The visitor who tries to decode Ryoan-ji will leave frustrated; the visitor who sits, watches the gravel's pattern and the rocks' stillness, and accepts that the garden does not explain itself, will have understood it. That acceptance is the garden's teaching, and it is also the teaching of the tea house and the villa.

The Stroll Garden: Kenrokuen and Katsura

The stroll garden is Ryoan-ji's opposite: a landscape to be walked, not contemplated from one seat. Kenrokuen, in Kanazawa, is the great public example, one of Japan's three celebrated gardens, its ponds, streams, hills, pines and lanterns composed over centuries as a daimyo's pleasure ground. In winter, its pines are protected by *yukitsuri*, the conical rope-work that holds their branches against snow, a structure as beautiful as the trees it protects and a reminder that the garden is maintained, not merely grown. The garden's famous two-legged lantern, the Kotoji lantern, its views over the city, its tea houses and its winding paths, are composed as a journey whose pleasures are sequential: no single view is the garden, because the garden is the walk.

Katsura's garden, described in the last chapter, is the stroll garden at its most refined, and the comparison is instructive. Kenrokuen is public, large and varied, a garden for a city; Katsura is private, concentrated and disciplined, a garden for a prince. Both use the same devices — the pond as a mirror, the island as a destination, the bridge as a threshold, the borrowed scenery, the *shakkei*, that frames a distant hill as part of the garden — but they use them at different scales and for different audiences. The stroll garden's lesson is that landscape can be architecture: it can be planned, sequenced and framed like a building, and its materials — water, stone, pine, gravel — can be composed with the same precision as timber and plaster. The garden designer is an architect whose building is alive, and whose maintenance is never finished.



Photo: Winniepix, via Wikimedia Commons (CC BY 2.0). Source: https://commons.wikimedia.org/wiki/File%3AKenrokuen_Garden%2C_Kanazawa_%2853621201294%29.jpg

The Courtyard Garden and Borrowed Scenery

The smallest garden type is the most ingenious. The courtyard garden, the *tsubo-niwa*, fits into the light well of a *machiya* or the court of a temple, a space no larger than a few tatami mats, and it must do the work of a whole landscape in miniature: a stone lantern, a water basin, a maple or a bamboo, a few rocks and moss, composed to be seen from the rooms around it. The courtyard garden is not walked in but looked at, and its composition is therefore frontal, like a painting, its depth created by layering — a near stone, a middle shrub, a far bamboo — in a space that is, in reality, only a few metres deep. The *machiya*'s *tsubo-niwa*, described in Chapter V, is the type's classic form, and its survival in Kyoto's townhouses is one of the tradition's quiet triumphs.

The largest garden device is the opposite of the courtyard: borrowed scenery, *shakkei*, by which a distant mountain, a temple roof or a stretch of water is framed as part of the garden's composition, so that the garden seems to extend to the horizon. The device requires a low wall or hedge, a carefully placed opening, and a distant feature worth borrowing, and it turns the garden's boundary into a frame rather than a limit. The technique is used at Katsura, at the great temple gardens and at the villas of Kyoto's eastern hills, and it is the garden's most architectural idea: that a building's site is part of its design, and that the landscape beyond the fence can be composed as surely as the rocks within it. The garden, at its greatest, does not end at its fence; it ends at the mountain.



Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3ANezu_Museum_Garten-20091020-RM-113550.jpg

The Modern Garden: Kuma and the Museum Garden

The garden tradition did not end with the Edo period. The modern masters have made gardens as surely as their predecessors, though their materials and their sites are new. Kengo Kuma's garden at the Nezu Museum in Tokyo, a contemporary museum in a historic garden, reworks the stroll garden for a museum audience: bamboo fences, stone lanterns, stepping stones and a tea house, composed as a sequence that slows the visitor before the museum's galleries. The garden is not a reconstruction of an old garden but a new garden in the old grammar, and its success lies in its restraint — the same restraint that marks Kuma's buildings, where small parts and natural materials do the work of monumentality.

The museum garden is, in fact, the garden tradition's most active contemporary form. Museums, hotels and houses across Japan commission gardens that quote the old types — dry gravel, stroll ponds, courtyard pockets — in new materials and for new uses, and the best of them, like the Nezu garden, show that the grammar is alive, not merely preserved. The risk, as with the *machiya*, is that the garden becomes a stage set, a picturesque backdrop for photographs rather than a composed sequence for walking and sitting. The test, as always, is the experience: does the garden slow you, frame a view, change your footing and your attention as you move through it? If it does, it is architecture, whether it was built in the fifteenth century or the twenty-first.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

VIII

Tea Houses and the Aesthetics of Wabi-Sabi

Sen no Rikyu and the Small Room

Joan: A National Treasure Tea House

Wabi-Sabi: The Aesthetic in Words

The Roji: The Path to Tea

Tea and the Modern House



Photo: Lombroso, via Wikimedia Commons (Public domain). Source: https://commons.wikimedia.org/wiki/File%3AUrakuen_Joan.jpg

Sen no Rikyu and the Small Room

The tea house begins with a man and a room. Sen no Rikyu, tea master to the warlords Oda Nobunaga and Toyotomi Hideyoshi in the sixteenth century, fixed the discipline of tea — the preparation of powdered green tea, matcha, whisked in a bowl, served in a sequence of gestures — and the room in which it is performed: small, plain and dark, its walls of mud plaster, its posts of natural timber, its ceiling low, its entrance a crawl-through door, the nijiriguchi, so low that every guest, samurai or merchant, must stoop to enter. Rikyu's ideal, wabi, is the beauty of poverty, rusticity and imperfection: a cracked tea bowl valued above a perfect one, a flower in a bamboo vase above a bouquet, a room whose plainness is not emptiness but attention. The tea house is wabi made into architecture, and its smallness is its point.

Rikyu's own fate is part of the story: ordered to commit suicide by Hideyoshi in 1591, for reasons still debated — his influence, his independence, his refusal to flatter — he became a martyr to the aesthetic he created, and the tea house became, after his death, a protected space, a world apart from politics where rank was suspended at the low door. The tea ceremony's politics are therefore inseparable from its architecture: the small room, the low entrance and the shared bowl are a social programme, a deliberate levelling, and the warlords who patronised tea understood that perfectly well. The tea house is the smallest building in the Japanese tradition and the most politically charged, and its plainness should never be mistaken for innocence.

Joan: A National Treasure Tea House

The Joan tea house, at Urakuen in Inuyama, is one of the great surviving tea houses, designated a National Treasure and attributed, by tradition, to the tea master Oda Urakusai, brother of Nobunaga, in the early seventeenth century. Joan is a small building — a tea room of a few mats, an anteroom and a preparation room — its plaster walls, bamboo screens and low roof composing the tea aesthetic at its most refined. Its name, Joan, means the hut of contentment, and its details — the window placed to catch a single view, the tokonoma with its scroll, the hearth sunk in the floor — are the tea house's grammar at full stretch. The photograph in this book shows Joan's exterior, its plaster and bamboo, because the interior, like Katsura's, is restricted, and the exterior's plainness is itself the tea house's statement.

Joan's attribution, like many tea-house attributions, is traditional rather than documented, and this book states that honestly: the building's date and authorship rest on tea-school tradition, not on inscriptions, and its present form includes later repairs. That uncertainty does not diminish Joan, because the tea house's value lies not in its authorship but in its use — it is still used for tea, still maintained by the tea tradition, and still teaches, to anyone who enters it, the discipline of the small room. The tea house, like the shrine, is preserved by practice, not by documentation, and its National Treasure status protects a living ritual as much as a building. The visitor who sees Joan's exterior should imagine its interior: dark, small, warm from the hearth, and utterly unlike the great halls of the temples.

Wabi-Sabi: The Aesthetic in Words

Wabi-sabi is the most quoted and most misunderstood idea in Japanese aesthetics, and this book defines it carefully. Wabi, originally the loneliness of a hermit, became, in Rikyu's hands, the beauty of poverty and simplicity: plain, unadorned things, worn by use, valued for their quietness. Sabi, originally the patina of age, became the beauty of time itself: rust, moss, weathered wood, the trace of use and season on a surface. Together, wabi-sabi values the imperfect, the impermanent and the incomplete — a cracked bowl, a mossy stone, a room whose plaster is stained — not as flaws to be repaired but as qualities to be contemplated. The aesthetic is not a style but an attitude, and it can be applied to anything: a tea bowl, a garden, a building, a life.

The misunderstanding to avoid is the idea that wabi-sabi means merely old or shabby. A tea house is not wabi because it is poor but because its poverty is deliberate, refined and expensive in its own way — the unpeeled post is chosen, not accidental; the mud wall is plastered by a master, not left unfinished; the cracked bowl is a masterpiece by a master potter, not a reject. Wabi-sabi is an aristocratic aesthetic of restraint, developed by warriors and merchants who could afford grandeur and chose plainness, and its discipline is stricter than ornament's, because there is nowhere to hide a mistake. The modern use of the term as a synonym for rustic decor misses that discipline, and this book uses the term only in its strict sense: the deliberate, refined beauty of imperfection.

The Roji: The Path to Tea

Before the tea room comes the roji, the dewy path, and it is as much a part of the tea house's architecture as the room itself. The roji is a garden path of stepping stones, lanterns, a water basin and plantings, leading from the outer gate to the tea house's low entrance, designed to slow the guest, to wash the dust of the world from their feet at the basin, and to prepare their attention for the ceremony. The path is not straight but turning, its stones irregular, its plantings dense, so that the guest cannot see the tea house until the last turn, and arrives, as the tea masters intend, with their senses sharpened by the walk. The roji is the shrine's approach translated to the scale of a garden, and it shows, once again, that Japanese architecture is a sequence, not an object.

The roji's details are the tea aesthetic in miniature: the stone basin, the tsukubai, set low so that the guest must crouch to wash their hands, a gesture of humility before entering; the lantern, placed not symmetrically but where its light will fall on a stone or a maple; the stepping stones, spaced for a slow, deliberate pace, not for hurrying. The stone basin in the Katsura garden, photographed in this book, is a roji element in a villa garden, and it shows the same discipline: a rough stone, hollowed for water, placed among trees, its simplicity the product of careful choice. The roji teaches that the approach to a building can be the building's most important room, and that a path, well designed, is architecture.



Photo: Renehaas, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AKatsura_Villa%2C_Kyoto_%281%29.jpg

Tea and the Modern House

The tea house's influence on the modern Japanese house is profound and often unacknowledged. The small room, the plain materials, the sliding screens, the tokonoma alcove and the garden view of the tea house became, through the villa and the merchant house, the vocabulary of the Japanese domestic interior, and through Taut and Gropius, they entered the modern house worldwide. The contemporary masters return to tea constantly: Ando's concrete rooms owe their discipline to the tea house's smallness; Kuma's timber lattices owe their texture to its screens; Ban's paper structures owe their lightness to its impermanence. The tea house is the tradition's smallest building and its most fertile, because its discipline — small, plain, attentive — can be applied at any scale.

The tea house also poses the tradition's sharpest question: can an architecture of deliberate poverty survive in a wealthy, industrial society? The tea ceremony survives, practised by millions, and tea houses are still built, but they are now mostly built for ceremony and for museums, not for daily life, and the wabi aesthetic has become, for many, a style rather than a discipline. That is not a failure but a transformation, and this book does not lament it: the tea house's survival as a ritual, a museum piece and a design idea is itself a form of life, and its influence on the houses,

gardens and museums of contemporary Japan is visible to anyone who looks. The small room endures, because its lesson — that attention matters more than size — is one that every age needs to relearn.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

IX

Materials and Construction: Wood, Paper, Earth, Stone, Concrete

Wood: Cedar, Cypress, and the Carpenter's Choice

Paper, Bamboo, and the Screen Wall

Earth, Plaster, and Thatch

Stone: Castle Walls and Garden Rocks

Concrete: The New Timber



Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AShirakawa_Gassho-zukuri_14.jpg

Wood: Cedar, Cypress, and the Carpenter's Choice

Wood is the tradition's first material and its measure. Japanese cedar, sugi, and cypress, hinoki, are the great building timbers: cedar for posts, beams and boarding, cypress for the finest work — the shrine at Ise is built of hinoki, chosen for its straight grain, its resistance to rot and its fragrance, which is itself part of the shrine's experience. The carpenter's choice of timber is not generic but specific: a post's grain must run true, a beam's knots must fall where they do not weaken it, a bracket arm's wood must be dense enough to carry weight and fine enough to carve. The timber is used in large sections, because the joints require it, and it is left visible, because its grain is the building's finish. A Japanese timber building is, in a sense, a forest reassembled as a house.

Wood's weakness is also its strength. It burns, it rots, it is eaten by insects, and the great temples have burned repeatedly — Todai-ji twice, Kiyomizu-dera repeatedly — yet wood's reparability is what has kept the tradition alive: a burned hall can be rebuilt, a rotted post replaced, a joint re-cut, all in the same material and by the same craft. Stone, once broken, is broken; wood, once burned, can be grown again. That cycle — grow, cut, join, repair, rebuild — is the tradition's ecology, and it depends on forestry as much as on carpentry: the great temples maintained their own forests, and Ise's forest is managed on a cycle that matches its rebuilding. The modern timber industry, with its plantation cedar and its engineered wood, is the same cycle industrialised, and the question of whether plantation timber can carry the tradition's quality is one the final chapters take up.

Paper, Bamboo, and the Screen Wall

Paper is the tradition's second material, and its most surprising. The shoji screen, paper on a lattice, is not a poor substitute for glass but a different technology: it diffuses light, insulates against cold, divides rooms that can be opened, and gives the interior its characteristic glow — a soft, even light that painters and photographers have celebrated for centuries. The paper, washi, made from mulberry bark, is strong, repairable and replaceable, and its renewal, like the shrine's, is part of the building's maintenance. The fusuma, opaque paper on a frame, carries painting — the great Kano school screens of castles and temples are fusuma at monumental scale — and the rain shutter, the amado, slides over the shoji at night and in storms, completing the wall's system of layers.

Bamboo is paper's partner: light, strong and fast-growing, it makes fences, screens, scaffolding, water pipes and the tea house's details, and its hollow, jointed form is itself a model for Japanese design — strength through segmentation, like the pagoda's storeys. The bamboo fence of the Nezu garden, the bamboo screen of the tea house and the bamboo scaffolding that still wraps temple restorations are all the same material at different scales, and they show a tradition that uses what grows quickly and renews itself. Paper and bamboo together make the Japanese wall a system of layers — screen, shutter, lattice, curtain — rather than a single mass, and that layered wall is the building's climate control, its privacy and its beauty in one.

Earth, Plaster, and Thatch

Earth is the tradition's third material, and its most humble. Mud plaster, tsuchi-kabe, made of clay, straw and sand, coats the walls of tea houses, storehouses and farmhouses, its texture and colour varying with the soil and the plasterer's hand. The plaster's thickness insulates, its mass steadies temperature, and its surface, left unpainted, carries the building's age in stains and cracks that wabi-sabi values rather than repairs. The storehouse, the kura, is plaster at its most functional: thick white plaster over a timber frame, its walls fireproof, its small windows shuttered in iron, its roof tiled — a safe for goods, documents and valuables in a city of timber houses that burned regularly. The castle's white plaster is the kura's plaster at monumental scale, and its beauty is the beauty of a fireproof wall.

Thatch is earth's partner on the roof. The steep thatched roofs of Shirakawa-go, the bark roofs of Ise, the thatch of the tea house, all shed water and snow by steepness and thickness, and all require renewal — thatch every twenty or thirty years, bark every twenty — so that the roof, like the shrine, is a cycle rather than a fixture. The thatcher's craft, like the carpenter's, is a living tradition, and the villages of Shirakawa-go, protected by UNESCO since 1995, maintain their roofs by communal labour, rethatching one house a year in a festival of work. The lesson of earth and thatch is that the cheapest materials, well worked and regularly renewed, can outlast the most expensive, if the craft to renew them survives.

Stone: Castle Walls and Garden Rocks

Stone in Japan is used sparingly and precisely, because the tradition is timber and stone is the exception that proves it. The castle wall is the great stone work: unmortared stones fitted by eye, their faces sloped, their corners locked, their drainage designed — a masonry of mass and friction, not of mortar and precision. The garden rock is the other stone work: rocks chosen for their shape, placed as mountains, islands or animals, their setting as deliberate as any building's plan. The stone lantern, the water basin and the stepping stone are stone at domestic scale, and their roughness is deliberate, a contrast to the timber's finish. Stone's role is therefore complementary: it grounds the timber building, drains its site, marks its thresholds and composes its garden, but it never carries the building itself.

That restraint is itself a design principle. Where European architecture builds in stone and decorates in timber, Japanese architecture builds in timber and accents in stone, and the contrast gives each material its full value: the timber's warmth against the stone's cold, the frame's regularity against the rock's irregularity, the plaster's white against the stone's grey. The castle wall, seen from below, is stone at its most monumental, and the garden rock, seen from a veranda, is stone at its most poetic, and both are the same material used with the same restraint. The modern masters, from Ando's concrete to Kuma's stone walls, inherit that restraint, and the best contemporary Japanese buildings are still, at heart, timber buildings with stone accents, even when their structure is concrete.

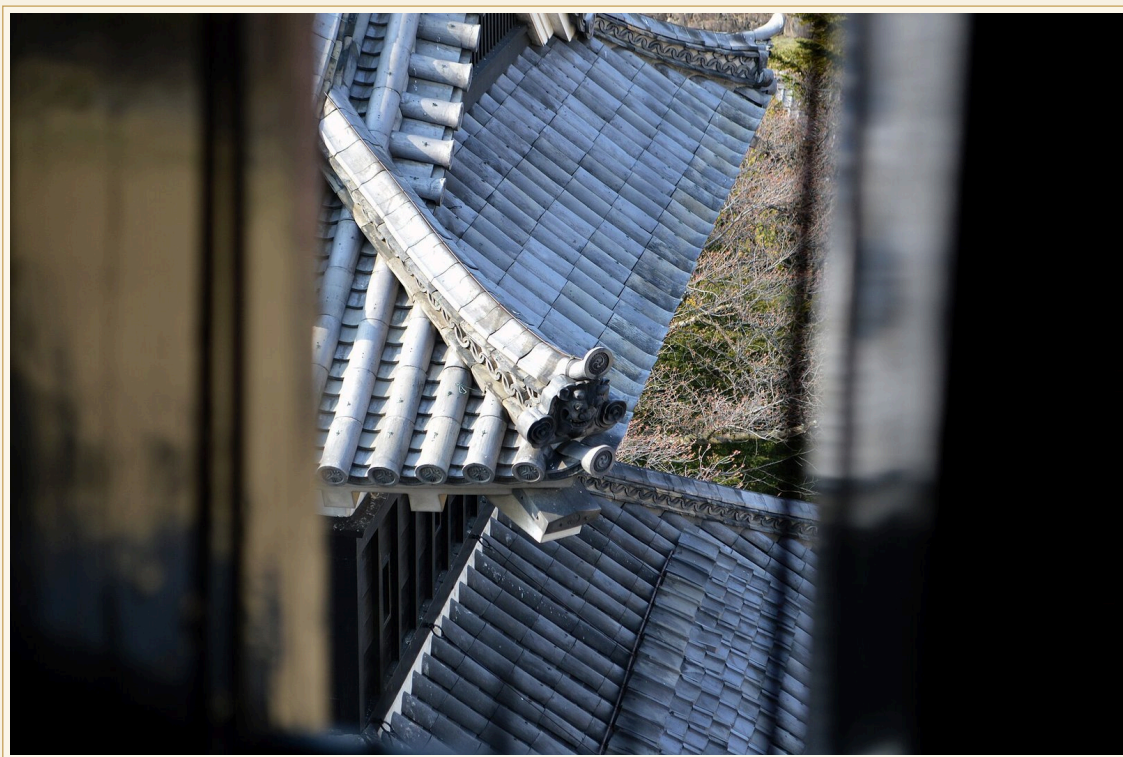


Photo: DimiTalen, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AInui_Kotenshu_roof_details_seen_from_the_Dai-Tenshu%2C_Matsumoto_Castle%2C_2016.jpg

Concrete: The New Timber

Concrete is the tradition's great modern material, and its story is the story of the second half of this book. Introduced for earthquake resistance after the 1923 Kanto earthquake, concrete became, in the hands of Tange, Ando and their successors, a material of Japanese character: cast in timber formwork, its surface carrying the grain of the boards, its mass handled like timber — posts, beams and slabs rather than monolithic walls. Ando's exposed concrete, the fair-faced concrete whose formwork marks are left visible, is timber's discipline translated: the board-marked surface is the grain, the tie holes are the joints, and the building's beauty lies, as with timber, in the honesty of its making. Concrete, in Ando's hands, is not the opposite of wood but its successor, a material that can be cast, like a joint, with precision and left visible.

Concrete's problem is also timber's problem in a new form: it is permanent in a way that timber is not, and its permanence sits uneasily with a tradition built on renewal. A concrete capsule tower cannot be renewed capsule by capsule if its capsules are never replaced; a concrete museum cannot be rebuilt every twenty years. The contemporary masters answer that problem in different ways — Kuma by returning to timber, Ban by building in paper and cardboard, SANAA by making concrete and glass so light that they seem temporary — and the debate over concrete's

place in the tradition is the debate of the final chapters. The materials chapter ends, therefore, not with a conclusion but with a question: what does a tradition built on wood do when its buildings are built of concrete, and can concrete learn wood's lesson — that a building survives by being repaired, not by being permanent?



Photo: Zairon, via Wikimedia Commons (CC BY 4.0). Source: https://commons.wikimedia.org/wiki/File%3ANara_Todai-ji_Daibutsuden_Interior_Daibutsu_04.jpg

PLATES

Plate I — Himeji Castle



Photo: Gilles Desjardins, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AHimeji_Castle_Japan.jpg

The White Heron Castle of 1609, its white-plastered keep complex rising over stone walls and moats — the finest surviving Japanese castle and the samurai age's most complete statement in timber, plaster and stone.

PLATES

Plate II — The Grand Shrine of Ise



Photo: Raita, via Wikimedia Commons (CC BY 2.0). Source: https://commons.wikimedia.org/wiki/File%3AIsse_Grand_Shrine%2C_Mie_Prefecture%3B_November_2016_%2801%29.jpg

Visitors passing beneath the great torii at Ise, where the shrine has been rebuilt in fresh timber every twenty years for more than a millennium — permanence kept not in old wood but in an unbroken craft.

PLATES

Plate III — Horyu-ji, Ikaruga



Photo: ONO Masanobu, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AHoryu-ji_Kondo_and_Five-story_Pagoda_2022.jpg

The golden hall and five-storey pagoda at Horyu-ji, among the oldest wooden buildings on earth, standing in the temple founded, by tradition, in 607 — a timber frame that has outlasted empires.

PLATES

Plate IV — Todai-ji, Nara

Photo: Cun Cun, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File:%3A%C5%8Ddai-ji_Daibutsuden%2C_June_2019.jpg

The Great Buddha Hall at Todai-ji, rebuilt in 1709 at reduced scale, still one of the largest wooden buildings in the world, housing the Great Buddha dedicated in 752.

PLATES

Plate V — The Garden at Katsura Imperial Villa



Photo: Odd Roar Aalborg, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AThe_garden_around_the_Katsura_Rikyu_Imperial_Villa_in_Kyoto%2C_Japan.jpg

The stroll garden at Katsura, its pond, pines and a thatched tea house composed as a sequence of views — the sukiya ideal at the scale of a landscape, built for a prince in the seventeenth century.

PLATES

Plate VI — The Dry Garden at Ryoan-ji, Kyoto

Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0). Source: <https://commons.wikimedia.org/wiki/File%3ARyoan-ji-Garden-2018.jpg>

Fifteen rocks in raked gravel at Ryoan-ji, Kyoto, the most famous dry garden in Japan — a composition that refuses to explain itself, and is therefore still argued over.

PART III

Modern Encounters

Chapters ten to fourteen follow Japan's encounter with the West and its postwar reinvention: Meiji modernization, Metabolism and concrete, Ando and Kuma, SANAA and Ban, and the modern Japanese house and city.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

X

Meiji Modernization and the Western Encounter

*Opening the Country**Conder, Tatsuno, and Tokyo Station**The Imperial Crown Style and Its Debates**Wright, Le Corbusier, and the Return Journey**Earthquakes and the New Science of Building*



Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AMarunouchiL%26_Tokyo_Station_1.jpg

Opening the Country

In 1853, Commodore Perry's black ships arrived in Edo Bay, and within fifteen years Japan had undergone a revolution: the shogunate fell, the emperor was restored, and the new Meiji government set out to make Japan a modern state on Western lines — with a constitution, an army, a railway, a postal system and, crucially, Western architecture. The government built ministries, banks, stations, schools and factories in brick, stone and iron, in styles borrowed from London, Paris and Berlin, because architecture was diplomacy: a brick ministry told the Western powers that Japan was civilised, in their terms, and therefore not to be colonised. The Western encounter was not a matter of taste but of survival, and its buildings were instruments of statecraft before they were works of art.

The encounter was also a shock to the timber tradition. Brick and stone, iron and glass, were materials Japan had used sparingly, and their construction required new skills: bricklaying, stonecutting, iron framing, and the whole apparatus of Western building — drawings, specifications, contracts and professional architects. The government imported foreign architects, chief among them the British architect Josiah Conder, who arrived in 1877 to teach at the Imperial College of Engineering, and it sent Japanese students abroad, who returned to build the new state. The first generation of Japanese architects — Tatsuno Kingo, Katayama Tokuma, Sone Tatsuzo — were Conder's pupils, and their buildings, from Tokyo Station to the Akasaka Palace, are the Meiji state's public face: Western in style, Japanese in patronage, and, in their details, already negotiating between the two.

Conder, Tatsuno, and Tokyo Station

Josiah Conder's teaching was the foundation of modern Japanese architecture, and its character matters. Conder taught the Beaux-Arts system — classical orders, symmetrical plans, masonry construction — but he also studied Japanese art and architecture, collected Japanese crafts and argued, against the wholesale Westernisation around him, that Japanese tradition had values worth keeping. His pupils absorbed both lessons: they could design a brick ministry in correct Renaissance style, and they could also see, as Tatsuno did, that a Japanese building's timber, garden and roof had lessons for the modern architect. That double vision — Western technique, Japanese sensibility — became the characteristic stance of Japanese modernism, and it runs from Tatsuno through Tange to Kuma.

Tokyo Station, Tatsuno Kingo's masterpiece, opened in 1914 as the terminus of the national railway and the gateway to the capital. Its Marunouchi building, red brick with white stone trim, domed roofs and a long, symmetrical facade, is a European station in its composition and a Japanese building in its discipline: its brickwork, its domes and its detailing are executed with a precision that owes as much to the carpenter's tradition as to the bricklayer's. The station survived the Kanto earthquake, the firebombing and postwar rebuilding, losing its domes to war damage and regaining them in a restoration completed in 2012, and it stands today as the Meiji encounter's most beloved monument — a brick building that Tokyo treats with the affection it gives to temples. The station's restoration, like Himeji's, was debated, and its domes, rebuilt from photographs, are both original and new, in the tradition's familiar way.

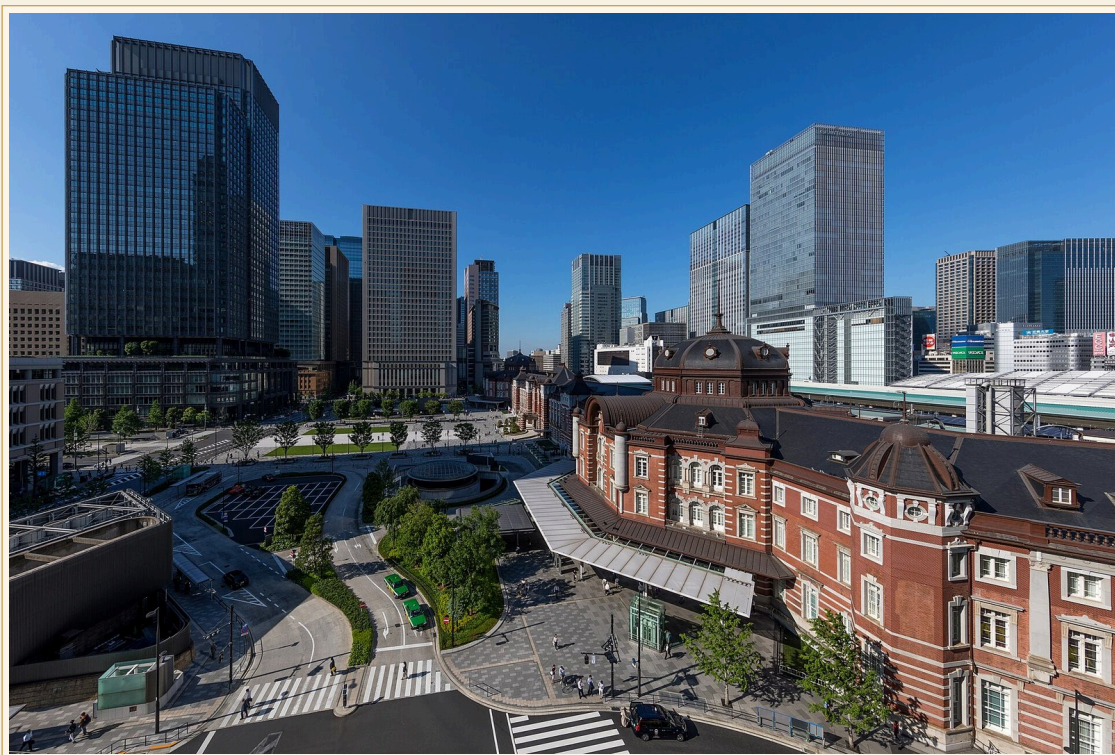


Photo: Basile Morin, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AMarunouchi_Central_Plaza_with_blue_sky%2CTokyo_station_and_Shin-Marunouchi_Building%2C_panoramic_view_from_JP_Tower%2CTokyo%2C_Japan.jpg

The Imperial Crown Style and Its Debates

The Meiji encounter produced its own backlash, and the Imperial Crown style, the *teikan yoshiki*, is its most visible product. In the 1930s, as nationalism rose, government buildings were designed as Western concrete frames crowned with Japanese tiled roofs — a compromise that was meant to say, at once, modern and Japanese, but that satisfied neither modernists, who saw the roof as decoration, nor traditionalists, who saw the frame as foreign. The style's great examples — the Tokyo National Museum's main building, the Diet-adjacent ministries, the military buildings of the period — are imposing and uneasy, and their history is inseparable from the militarism they served. The Imperial Crown style is a warning: that combining traditions by pasting one onto the other produces neither, and that a real synthesis must work through structure, plan and material, not through a roof applied to a box.

The debate over the Imperial Crown style was also a debate over what Japanese architecture is. The modernists, led by figures like Sutemi Horiguchi and Kunio Maekawa, argued for a modernism rooted in Japanese space — the *tatami*, the sliding screen, the garden — rather than in Japanese roofs, and their houses of the 1930s, small, timber and modern, are the counter-proposal to the Crown style's monumentality. The traditionalists argued for the carpenter's craft and the temple's forms, and their work kept the timber tradition alive through the war years. The war ended the debate by destroying much of both sides' work, and the postwar rebuilding began from the ruins, with the modernists, chastened and energised, in the ascendant. The Crown style's buildings survive, controversial and impressive, as a reminder that architecture and politics are never separate in Japan.

Wright, Le Corbusier, and the Return Journey

The Western encounter was not one-way. While Japan imported Western architecture, the West discovered Japanese architecture, and the discovery transformed modernism. Frank Lloyd Wright, who visited Japan in 1905 and built the second Imperial Hotel in Tokyo, completed in 1923, absorbed the Japanese plan — the open interior, the garden room, the low roof, the horizontal line — and made it central to his Prairie houses and, through them, to American domestic architecture. Le Corbusier, who never visited Japan, admired its houses from photographs and writings, and his open plan and his pilotis owe something to the Japanese frame. Bruno Taut's Katsura, described in Chapter VI, is the most famous case, but the traffic was general: the West's modern house is, in part, a Japanese house translated.

The return journey matters because it explains the postwar masters' confidence. When Tange, Kurokawa and Ando designed for the world, they were not borrowing a foreign modernism but reclaiming a tradition that modernism had already borrowed from Japan — and their work's Japanese character was therefore not a matter of roofs and ornaments but of space, structure and garden, the very qualities the West had admired. The Imperial Hotel's survival of the 1923 Kanto earthquake, its floating foundations and its low, broad mass, became a legend in both countries, and Wright's hotel, demolished in 1968 despite protests, is still mourned in Japan as a lost synthesis. The encounter's lesson is that influence is circular: Japan gave the West its house, the West gave Japan its station, and the modern masters work in the space between.

Earthquakes and the New Science of Building

The Western encounter also brought a new science, forced by disaster. The Nobi earthquake of 1891, which killed thousands and destroyed timber and brick buildings across central Japan, began the systematic study of earthquakes and their effect on buildings, and the Great Kanto earthquake of 1923, which devastated Tokyo and Yokohama, destroyed much of the brick city and killed more than a hundred thousand people, many in the fires that followed. The lesson of 1923 was brutal: brick, the Meiji state's chosen material, failed in fire and in shaking, and the rebuilding turned to reinforced concrete and steel, with seismic design — flexible frames, shear walls, and later base isolation — as a central discipline. Japanese seismic engineering, now the world's most advanced, was born in those ruins.

The earthquake's effect on the timber tradition was subtler. Timber houses, flexible and light, survived shaking better than brick, but they burned, and the fire that follows an earthquake has killed more Japanese than shaking itself. The postwar response was therefore twofold: make timber houses fire-resistant and make concrete buildings earthquake-resistant, and the two technologies converged in the modern Japanese house and tower. The pagoda's lesson — flexibility over rigidity — became engineering doctrine, and the base-isolated building, which sits on bearings that absorb shaking, is the pagoda's central pillar translated into modern mechanics. Earthquakes, which destroyed so much of Japan's architecture, also made its architecture the world's most inventive, and every contemporary building in this book is, in part, an earthquake building.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XI

Metabolism and Postwar Concrete: Tange, Kurokawa, Maki

*Ruins and Reinvention**Tange and the Tokyo Bay Plan**Kurokawa and the Capsule**Maki and the Quiet Metabolist**Expo 70 and the End of Metabolism*



Photo: Rs1421, via Wikimedia Commons (CC BY-SA 3.0). Source: <https://commons.wikimedia.org/wiki/File:Yoyogi-National-First-Gymnasium-01.jpg>

Ruins and Reinvention

In 1945, Japan's cities were ruins. Tokyo, Osaka, Hiroshima and Nagasaki had been firebombed or atomic-bombed, millions were homeless, and the rebuilding began with emergency huts, then with concrete apartments, then, as the economy recovered in the 1950s, with an architectural ambition that matched the country's recovery. The generation that came of age in the ruins — Kenzo Tange, born 1913, Kisho Kurokawa, born 1934, Fumihiko Maki, born 1928, Arata Isozaki, born 1931 — had studied Western modernism, survived war and occupation, and wanted an architecture that was both modern and Japanese, both international and rooted. Their answer, launched in 1960, was Metabolism: the idea that buildings and cities, like living organisms, should grow, change and renew themselves part by part.

Metabolism's context was the world's as well as Japan's. The postwar world was building new towns, new capitals and new housing at unprecedented scale, and the modern movement's certainties — the tower, the slab, the functional city — were already being questioned. The Metabolists' contribution was to add time to modernism: a building is not a finished object but a process, its permanent core carrying replaceable parts, its city not a fixed plan but a growing structure. The idea drew on Japanese tradition — the shrine rebuilt every twenty years, the house whose screens and mats are replaced, the city whose timber buildings are renewed — and on biology, the science of growth and decay that gave the movement its name. Metabolism was, in short, the timber tradition translated into concrete and urbanism, and its buildings are the postwar period's most original contribution to world architecture.

Tange and the Tokyo Bay Plan

Kenzo Tange was Metabolism's senior figure and its public face. His Hiroshima Peace Memorial Park, built from 1949 over the ruins of the atomic bombing, set the tone: a concrete axis of museum, cenotaph and dome, its memorial hall open to the sky, its architecture a frame for remembrance rather than a monument to itself. His Yoyogi National Gymnasium, built for the 1964 Tokyo Olympics, is his masterpiece: two gymnasiums whose roofs are suspended from great steel cables, their sweeping curves recalling, in Tange's own account, the roofs of Japanese temples and the hulls of ships, their concrete and steel carrying a timber idea at Olympic scale. The gymnasium's roofs, photographed from the plaza, are still the most dramatic roofs in Tokyo, and they show Tange's method: a Japanese form, a modern structure, and a scale that neither tradition nor modernism had attempted before.

Tange's Tokyo Bay Plan of 1960 was Metabolism's urban manifesto: a great spine across Tokyo Bay, carrying housing, offices and transport, its megastructure growing by extension, its parts replaceable, its city imagined as an organism rather than a grid. The plan was never built, and its scale now looks utopian, but its ideas — the linear city, the layered transport spine, the separation of permanent infrastructure from replaceable buildings — shaped Tokyo's actual growth, its bay developments and its waterfront, in ways that are still visible. The plan's failure as a project and its success as an idea is Metabolism's story in miniature: a vision too large to build, but too fertile to ignore, whose fragments — the capsule, the core, the spine — recur in buildings around the world.

Kurokawa and the Capsule

Kisho Kurokawa was Metabolism's theorist and its most built exponent. His book *Metabolism in Architecture*, published in 1977, argued that buildings should be composed of a permanent core and replaceable capsules — living units, prefabricated, bolted on, renewed when they wear out — and his Nakagin Capsule Tower of 1972 was the argument built: two concrete cores, eleven and thirteen storeys, carrying 140 capsules, each a steel box some ten square metres, fitted with a bed, a desk, a bathroom and a circular window, designed for the bachelor salaryman of the high-growth years. The capsules were meant to be unbolted and replaced every twenty-five years, so that the tower would renew itself like a shrine, and the tower's image — a concrete trunk with steel pods — became the world's image of Metabolism.

The tower's fate is the movement's tragedy and its lesson. The capsules were never replaced: their owners could not agree, the technology of replacement proved harder than the theory, and the building deteriorated, its capsules leaking and its concrete staining, until it was demolished in 2022, its capsules dispersed — some to museums, some to collectors, one to a park — as relics of a future that did not arrive. The demolition was debated worldwide, and preservationists argued, with reason, that the tower should have been saved as Metabolism's monument. But the tower's own theory complicates that argument: a building designed to be renewed part by part, whose parts were never renewed, poses the

question of whether preserving it whole betrays its idea. This book does not settle that question; it records the tower as it was photographed in 2019, three years before its end, and lets the reader judge.



Photo: Svetlov Artem, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3ATokyo_Nakagin_capsule_tower_2019-04_4.jpg

Maki and the Quiet Metabolist

Fumihiko Maki was Metabolism's quiet member, and his work is the movement's most liveable legacy. Where Tange planned megastructures and Kurokawa bolted capsules, Maki built groupings: Hillside Terrace in Tokyo, developed from 1969 over decades, a low-rise complex of apartments, shops and offices arranged around courtyards and lanes, its brick and concrete handled with a restraint that owes as much to the *machiya* as to modernism. Maki's idea, which he called group form, was that buildings should be composed as clusters, not as objects, and that the spaces between buildings — the court, the lane, the garden — matter as much as the buildings themselves. Hillside Terrace, still occupied and still admired, is Metabolism without the megastructure: growth by addition, not by spine, and renewal by gradual replacement.

Maki's later work — museums, universities and the 4 World Trade Center in New York — carried that restraint to an international scale, and his Pritzker Prize in 1993 recognised a career of quiet, consistent quality. Maki's lesson for Metabolism is that the movement's best idea was not the capsule or the megastructure but the in-between: the space between buildings, between inside and outside, between old and new, which Japanese architecture has always prized under the name *ma*. The capsule tower's demolition and Hillside Terrace's survival, side by side, are the movement's two endings: the spectacular idea that could not be maintained, and the quiet idea that could. Both are Metabolism, and both are part of this book's account.



Photo: Bigjap, via Wikimedia Commons (CC0). Source: <https://commons.wikimedia.org/wiki/File%3AKUROKAWA-Sony.jpg>

Expo 70 and the End of Metabolism

Metabolism's high-water mark was Expo 70 in Osaka, the first world's fair in Asia, where the Metabolists built pavilions, towers and capsules in a festival of technological optimism — Kurokawa's capsule house, the Festival Plaza's great space frame by Tange, Isozaki's robots and electronic environments. The Expo was visited by tens of millions and broadcast the movement's ideas worldwide, but it also marked their peak: the oil crisis of 1973 ended the high-growth years, the capsule's economics failed, and the megastructure's scale came to seem wasteful and inhuman. By the late 1970s, Kurokawa himself wrote that the Metabolist group carried on virtually no activity as a group, and the movement dissolved into its members' individual careers — Tange's public buildings, Kurokawa's symbiosis, Maki's group form, Isozaki's theory.

Metabolism's afterlife, however, has been long. Its ideas — the replaceable part, the growing city, the core and the capsule — recur in contemporary architecture's interest in modularity, prefabrication and circular construction, and its buildings, from Yoyogi to Hillside Terrace, are now protected and studied as classics. The movement's failure was not its ideas but its moment: a theory of renewal that required owners, technologies and economies that did not yet exist. The contemporary masters of the next chapters work in Metabolism's shadow, whether they acknowledge it or not, and the question they answer differently is Metabolism's own: how does a building change over time, and who decides? That question, more than any single building, is Metabolism's legacy.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XII

Contemporary Masters: Ando and Kuma

Ando: Concrete as Timber

Ando's Museums and the Pritzker

Kuma: Small Parts, Not Monuments

Kuma and the National Stadium

Two Masters, One Tradition



Photo: Bujatt, via Wikimedia Commons (CC BY-SA 2.5). Source: https://commons.wikimedia.org/wiki/File%3AChurch_of_Light.JPG

Ando: Concrete as Timber

Tadao Ando, born in Osaka in 1941, is the most famous living Japanese architect, and the most unlikely: self-taught, a former boxer and truck driver, he learned architecture by travelling, by reading and by building small houses in Osaka's dense row-house districts. His early masterpiece, the Row House at Sumiyoshi of 1976, is a concrete box inserted into a terrace, its interior divided by an open courtyard so that the inhabitant must cross the rain to reach the bedroom — a discipline of light, shadow and weather that became Ando's signature. His architecture is concrete, but its discipline is Japanese: the exposed concrete, cast in timber formwork, its surface marked by boards and tie holes, is timber's honesty translated; the courtyard is the tsubo-niwa at domestic scale; the light, admitted through slots and cuts, is the shoji's glow made monumental.

Ando's Church of the Light, completed in 1989 at Ibaraki in Osaka Prefecture, is the purest statement of that discipline. The chapel is a concrete box, its walls unadorned, its floor sloping toward the altar, its east wall cut by a cross-shaped slot through which daylight enters — the cross is not applied but subtracted, light itself becoming the ornament. The building's power lies in its emptiness: a room, a cross of light, and nothing else, the congregation seated in darkness facing the light. The photograph in this book shows that interior, the cross blazing against concrete, and it is the image by which Ando is known worldwide. The church's lesson is that Japanese architecture's restraint — plain materials, disciplined light, empty space — can be achieved in concrete as surely as in timber, and that the void, *ma*, can be a building's main material.

Ando's Museums and the Pritzker

Ando's later work scales that discipline to museums, churches and public buildings across Japan and the world: the Church on the Water in Hokkaido, its altar facing a pond and a cross standing in the water; the Chichu Art Museum on Naoshima, buried in the island's hillside so that its galleries are lit only by skylights and its art — Monet, Turrell, Walter De Maria — is seen in natural light; the Pulitzer Arts Foundation in St. Louis and the Modern Art Museum of Fort Worth, concrete boxes whose light and water recall the Japanese garden. Ando's museums are pilgrimage sites, visited for their architecture as much as for their art, and their discipline — concrete, water, light, sky — is the tea house's discipline at institutional scale.

Ando received the Pritzker Architecture Prize in 1995, the first Japanese architect after Tange's generation to do so, and his career since has been a negotiation between his early discipline and the scale of his commissions. His critics argue that his later buildings repeat the early formula, and that his concrete, once radical, has become a brand. His defenders argue that the formula — light, water, concrete, void — is not a repetition but a language, and that its variations, from a chapel to a museum, are the point. This book takes the middle view: Ando's early houses and churches are masterpieces, his museums are serious and often beautiful, and his importance lies less in any single building than in proving that a Japanese architecture of restraint could be built in concrete and recognised worldwide.

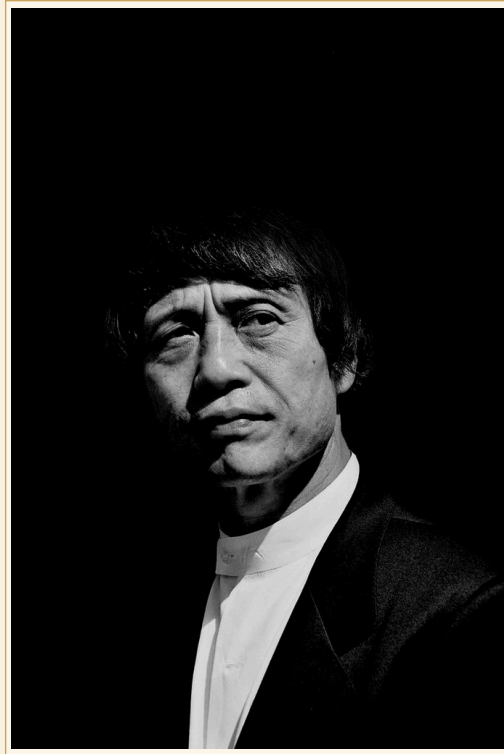


Photo: Christopher Schriner, via Wikimedia Commons (CC BY-SA 2.0). Source: https://commons.wikimedia.org/wiki/File%3ATadao_Ando_2004.jpg

Kuma: Small Parts, Not Monuments

Kengo Kuma, born in 1954, is Ando's great contemporary and his opposite. Where Ando builds in concrete masses, Kuma builds in small parts: timber slats, stone tiles, aluminium panels, each repeated to compose a surface that is neither solid nor transparent but layered, like a screen. His method, which he calls the architecture of small parts, is a deliberate rejection of the concrete monument: instead of a single heroic form, a building of many small pieces, each human-scaled, each replaceable, whose whole is a texture rather than a shape. The method owes everything to the Japanese tradition — the lattice, the screen, the shingle, the tile — and it is Kuma's answer to the question of what a Japanese architecture can be after concrete.

Kuma's Nezu Museum in Tokyo, completed in 2009, is the method's quiet masterpiece: a museum rebuilt in a historic garden, its eaves deep and tiled, its interior of timber and glass opening to the garden, its bamboo fences and stone lanterns composing a stroll that slows the visitor before the galleries. The Asakusa Culture Tourist Information Center, completed in 2012, is the method's urban version: a tower of stacked, roofed volumes, each floor's roofline echoing the district's traditional roofs, its interior of timber slats and faceted walls carrying the neighbourhood indoors. The photograph in this book shows that interior, its timber ceiling and its faceted wall, because the building's exterior, though famous, is less revealing than its inside: a tourist office that is also a lesson in how a contemporary building can belong to an old district without imitating it.



Photo: Fibustler, via Wikimedia Commons (CC BY 4.0). Source: https://commons.wikimedia.org/wiki/File%3AAsakusa_Culture_Tourist_Information_Center_21_09_2024_Picture_01.jpg

Kuma and the National Stadium

Kuma's Japan National Stadium, completed in 2019 for the Tokyo Olympics, is his largest building and his most debated. The stadium was originally designed by Zaha Hadid, whose vast, futuristic scheme was abandoned in 2015 after public outcry over its cost and scale, and Kuma's replacement — a lower, timber-latticed bowl, its eaves deep and planted, its structure a hybrid of steel and timber — was presented as a return to Japanese tradition and to human scale. The stadium's timber eaves, its layered roofs and its planting are genuinely impressive, and its scale, though still vast, is gentler than its predecessor's. Its critics argue that the timber is largely decorative, that the stadium remains a mega-structure, and that its Japanese character is a matter of cladding rather than structure.

That criticism is fair and also incomplete. The stadium's timber is indeed a screen over a steel structure, but the screen is not trivial: it changes the building's light, its shadow and its relationship to the surrounding park, and it makes a stadium, the most un-Japanese of building types, feel less alien in its site. The stadium's real lesson is about the limits of tradition at mega-scale: a timber idea can humanise a stadium, but it cannot make a stadium small, and the debate over the stadium is the debate over whether Japanese architecture should attempt mega-scale at all, or retreat to the small, the local and the crafted. Kuma's later work — small museums, pavilions and houses in timber — suggests his own answer, and it is the small buildings, not the stadium, that this book holds up as his most lasting contribution.



Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3ANezu_Museum_Garten-20091020-RM-113550.jpg

Two Masters, One Tradition

Ando and Kuma, taken together, show the contemporary tradition's range. Ando's concrete is monumental, spiritual and abstract, its Japanese character lying in light, void and discipline; Kuma's timber is textured, local and material, its Japanese character lying in craft, layering and small parts. Both owe their discipline to the tea house and the temple, and both have been criticised — Ando for repetition, Kuma for decoration — in terms that echo the criticisms of their predecessors. The pairing is instructive because it shows that there is no single contemporary Japanese architecture, but a field of positions, each negotiating between tradition and modernity, between material and idea, between Japan and the world.

The next chapter's masters — SANAA and Ban — extend that field further, toward lightness and paper, and the chapters after them ask what the tradition means for ordinary houses and cities. Ando and Kuma matter most, however, for a simpler reason: they are the architects most readers will have seen, in photographs if not in person, and their buildings are the contemporary tradition's public face. The reader who has stood in the Church of the Light's darkness, or walked beneath the Asakusa center's timber ceiling, has felt the tradition's continuity in their own body — and that bodily experience, more than any theory, is what this book is trying to convey.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XIII

Contemporary Masters: SANAA and Shigeru Ban

SANAA: The Wall Dissolved

Sejima, Nishizawa, and the Pritzker

Ban: Paper as Structure

Ban's Museums and the Paper Idea

Lightness as a Tradition



Photo: Keemz, via Wikimedia Commons (CC BY 2.0). Source: https://commons.wikimedia.org/wiki/File%3AKanazawa_21st_Century_Museum.jpg

SANAA: The Wall Dissolved

SANAA, the partnership of Kazuyo Sejima and Ryue Nishizawa, founded in 1995, is the most radical of the contemporary practices, and the most Japanese in an unexpected way. Their buildings dissolve the wall: glass circles, thin columns, white planes and open plans, so that inside and outside, public and private, flow into one another without the thresholds that traditional architecture choreographs. Their masterpiece, the 21st Century Museum of Contemporary Art in Kanazawa, completed in 2004, is a glass circle set in a park, its galleries arranged around courtyards, its entrances on every side, so that the museum has no front and no back, and the city can enter it from any direction. The building's glass wall, its thin columns and its reflective floors make it seem almost immaterial, a building that is barely there.

That immateriality is SANAA's Japanese inheritance, though it looks nothing like a temple. The traditional house's sliding screens, its open plan and its garden room already dissolve the wall, and SANAA's glass does the same at museum scale, with a precision that only modern glass and steel allow. The Kanazawa museum's circular plan, its courtyards and its openness are the *machiya*'s deep plan and the villa's garden sequence translated into a public building, and its success — it is one of Japan's most visited museums — lies in that openness: children play in its courtyards, visitors wander its galleries without a prescribed route, and the museum feels like a park pavilion rather than a temple of art. The photograph in this book shows its interior, the curved glass wall and its reflection, because the building's outside, a white disc in a park, is less revealing than its inside, where the wall's dissolution can be felt.

Sejima, Nishizawa, and the Pritzker

Sejima, born in 1956, and Nishizawa, born in 1966, won the Pritzker Architecture Prize jointly in 2010, the second Japanese partnership to do so, and their later work — the Rolex Learning Center in Lausanne, its undulating floor plain rising like a landscape; the Louvre-Lens in France, its glass and aluminium pavilions in a former mining landscape; the Grace Farms Foundation in Connecticut, its timber canopy snaking through the woods — carries the Kanazawa idea worldwide: buildings as landscapes, walls as glass, plans as free movement. Their work's lightness has been criticised as fragility, and its openness as a lack of monumentality, but those criticisms miss the point: SANAA's monumentality is not mass but space, and their buildings' power lies in the freedom they give their users to move, to gather and to see.

SANAA's Japanese character is therefore the hardest to pin down and the most interesting. It does not quote temples or tea houses; it inherits their spatial logic — the open plan, the garden room, the threshold dissolved rather than marked — and it applies that logic to museums, schools and offices worldwide. The firm's work suggests that the Japanese tradition's future lies not in its forms but in its spaces, and that a glass circle in Kanazawa can be as Japanese as a timber temple in Nara, if its space is composed with the same attention to light, movement and garden. That suggestion is debated, as it should be, and the debate is the contemporary tradition's most fertile one.

Ban: Paper as Structure

Shigeru Ban, born in 1957, is the contemporary master whose material is the most surprising: paper. Ban began in the 1980s by building structures from paper tubes — cardboard cylinders, normally used for fabric rolls, glued, waterproofed and joined — first as exhibition structures, then as houses, then, after the Great Hanshin earthquake of 1995, as disaster relief. His Paper Church in Kobe, built in 1995 for the Takatori Catholic congregation whose church had been destroyed, is a hall of paper-tube columns and a tent roof, assembled by volunteers in weeks, its interior warm, light and dignified — a church that cost almost nothing and meant everything to its congregation. The photograph in this book shows that interior, its paper tubes rising like columns around the altar, because the building's structure is its meaning.

Ban's paper architecture is not a gimmick but a philosophy. Paper tubes are cheap, light, recyclable and strong enough, when properly engineered, to carry real loads, and their use for disaster relief — in Kobe, in Turkey, in Rwanda, in Christchurch — is a deliberate ethical choice: that architects should serve the displaced, not only the wealthy, and that a temporary building deserves as much design as a permanent one. Ban's Cardboard Cathedral in Christchurch, New Zealand, completed in 2013 after the city's earthquake, carries the same idea to a larger scale: paper tubes, timber and polycarbonate composing a cathedral that is both temporary and monumental. Ban won the Pritzker Prize in 2014, the jury citing his disaster-relief work alongside his museums, and his career since has moved between the two — paper pavilions for museums, paper shelters for refugees — with the same material and the same conviction.



Photo: Bujdosó Attila, via Wikimedia Commons (CC BY-SA 2.5). Source: https://commons.wikimedia.org/wiki/File%3ATakatori_Catholic_Church.JPG

Ban's Museums and the Paper Idea

Ban's museum work shows that paper is not only for emergencies. His Centre Pompidou-Metz in France, its roof a vast timber and fabric hexagon inspired by a Chinese bamboo hat, and his Aspen Art Museum in Colorado, its timber lattice facade recalling the Japanese screen, apply the paper idea — light, layered, replaceable materials — to permanent buildings, and their success lies in the same qualities as his shelters: lightness, transparency and a structure that can be read. Ban's paper tubes have also entered his houses and offices, where they serve as columns, partitions and furniture, and his experiments with cardboard, timber and fabric form a consistent research programme: how light can a building be, how little material can it use, and how much dignity can it give its users?

Ban's lesson for the tradition is that impermanence, which the shrine and the tea house treat as philosophy, can also be engineering. A paper building is impermanent by design, and its impermanence is not a flaw but a virtue: it can be built quickly, dismantled, recycled and rebuilt, like the shrine, and its lightness is a response to a world of disasters, migrations and climate change. Ban's work therefore closes a circle that began with Ise: a building tradition that rebuilds every twenty years finds, in paper, a material that rebuilds every season, and the question of what counts as permanent is asked again, in a new form. That question is the tradition's oldest, and Ban asks it with the most contemporary materials.

Lightness as a Tradition

SANAA and Ban, taken together, show the contemporary tradition's lightest direction. Where Ando is heavy and Kuma is textured, SANAA is transparent and Ban is paper-light, and both suggest that the Japanese tradition's future lies in lightness — in buildings that use less material, admit more light, and impose less on their sites. That lightness is not new: the timber frame, the paper screen and the thatched roof were already light, and the contemporary masters' glass and paper are their successors, not their opposites. The tradition's continuity lies in that lightness, in the preference for a building that can be opened, dismantled and renewed over a building that must stand forever.

The lightness direction also poses the tradition's hardest contemporary question: can a light building be a lasting building? SANAA's glass circles require constant maintenance, Ban's paper structures require renewal, and both depend on care and craft in the same way that timber buildings do. The answer, which the final chapters develop, is that lasting, in Japan, has never meant unchanging: it has meant maintained, re-

newed and loved, and a glass museum or a paper church that is maintained with the same discipline as a temple will last as long as the discipline does. Lightness, in that sense, is not fragility but a different kind of permanence — the permanence of care, not of mass.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XIV

The Modern Japanese House and City

*The Postwar House**The Machiya Revival and the Old House**Tokyo: The City That Rebuilds Itself**Kyoto and the Preserved City**Housing, Ageing, and the Empty House*

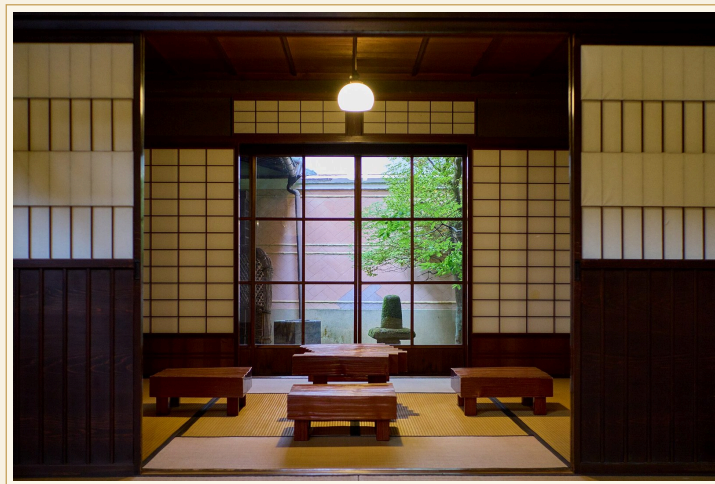


Photo: lumoplank, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File:%3ATakayama%2C_Part_II_-_Takayama6392.jpg

The Postwar House

The ordinary Japanese house of the postwar period is the tradition's great untold story, because it is not a masterpiece but a type: the small detached house on a small plot, its rooms tatami and Western mixed, its kitchen and bathroom modernised, its garden reduced to a strip, its structure timber or, increasingly, light steel. The postwar house was built in millions, first as emergency housing, then as the standard product of house builders, and its plan — a living room, a dining-kitchen, two or three bedrooms, a bath and a toilet, all on two floors of less than a hundred square metres — is the frame within which most Japanese live. Its architecture is not famous, but it is the tradition's real test: can the timber house, the tatami room and the garden survive in a small, standardised, mass-produced form?

The answer is mixed, and honestly so. The postwar house kept the tatami room, often one room among Western rooms, and it kept the raised floor, the sliding screens and the small garden, but it also adopted Western furniture, Western kitchens and fixed rooms, and its timber frame was increasingly hidden behind plasterboard and vinyl. The house's quality varied wildly: the best, by architects like Makoto Shinohara and Kazuo Shinohara, are masterpieces of small space, their split levels, courtyards and skylights carrying the villa's discipline into a hundred square metres; the worst, by volume builders, are cramped, dark and short-lived, demolished after thirty years in a cycle of rebuilding that wastes timber and land. The postwar house's story is therefore the tradition's story at domestic scale: a system of great refinement, mass-produced, sometimes brilliantly and sometimes badly.

The Machiya Revival and the Old House

Alongside the new house, the old house has found a new life. The machiya revival, described in Chapter V, has turned Kyoto's townhouses into lodgings, restaurants and studios, and the minka revival has done the same for farmhouses across the country: thatched farmhouses restored as museums, lodgings and second homes, their great timber frames and earth floors celebrated as the tradition's vernacular heart. The revivals are popular and controversial in equal measure: they preserve buildings that would otherwise be demolished, but they also turn houses into commodities, and the farmhouse as a museum is not the farmhouse as a working house. The honest view is that the revivals are a form of preservation by reuse, and that reuse, like Ise's rebuilding, changes what it preserves.

The old house's other afterlife is the architect's house: contemporary architects who restore minka and machiya for themselves, living in timber frames with modern insulation, heating and kitchens, and showing that the old house can be a modern house if its fabric is upgraded with care. Those restorations are expensive and individual, but they point to a model — the old frame, the new services, the garden kept — that could be generalised if policy and craft supported it. The modern Japanese house's future may therefore lie not in choosing between old and new but in combining them: the timber frame and the garden from the tradition, the insulation and the services from the present, and the discipline of the small room from both.

Tokyo: The City That Rebuilds Itself

Tokyo is the tradition's great urban paradox: the largest city on earth, and the one that rebuilds itself most completely. Tokyo's buildings are demolished, on average, after thirty years — houses after thirty, offices after forty — in a cycle driven by land prices, tax, earthquake codes and the preference for new over old. The result is a city that is always new, its streetscapes changing within a generation, its great buildings — the station, the gymnasium, the capsule tower — exceptions in a sea of replacement. That cycle is wasteful, and it is criticised, but it is also the timber tradition's logic at urban scale: a city of wood rebuilds itself, and a city of concrete, built on that logic, rebuilds itself too, whether its material suits renewal or not.

Tokyo's rebuilding also produces its energy. The city's small plots, its narrow lanes, its mix of houses, shops and workshops on a single street, are the machiya city's descendants, and its architecture — small, inventive, often startling — is the work of architects building on tiny sites with tight budgets, producing houses that are experiments in light, section and material. The Tokyo house, the small architect-designed house on a plot of fifty square metres, is the contemporary tradition's most inventive type, and its best examples — houses by Atelier Bow-Wow, by Suppose Design Office, by a generation of young practices — carry the villa's discipline into the smallest possible space. Tokyo, for all its demolition, is where the tradition is most alive, because it is where it is most tested.

Kyoto and the Preserved City

Kyoto is Tokyo's opposite: a city that preserves, its machiya districts, its temples and its gardens protected by law, its skyline limited, its new buildings regulated. Kyoto's preservation is a model and a warning: a model of how a city can keep its historic fabric while remaining a living city, and a warning of how preservation can freeze a city into a museum, driving out residents and turning streets into stages. The balance Kyoto strikes — preserved districts alongside modern development, temples beside universities, machiya beside apartment blocks — is imperfect and constantly negotiated, and its negotiations, in council chambers and neighbourhood associations, are as much a part of the tradition as the buildings themselves.

The two cities together show the tradition's urban range. Tokyo rebuilds and invents; Kyoto preserves and refines; both are Japanese cities, and both are necessary to the tradition's health. The contemporary masters work in both — Ando's museums in Tokyo and Naoshima, Kuma's houses in Kyoto and Tokyo, SANAA's museum in Kanazawa, Ban's shelters wherever disaster strikes — and their buildings' meaning changes with their city: a glass museum means one thing in Kanazawa's park and another in Tokyo's density. The city is the tradition's largest building, and its chapters, like this book's, are organised by place as much as by time.



Photo: Basile Morin, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AFacade_of_a_dwelling_with_sudare%2C_wooden_balustrades_and_yellow_lamp%2C_Shinbashi-dori%2C_Gion%2C_Kyoto%2C_Japan.jpg

Housing, Ageing, and the Empty House

The modern Japanese house faces a new problem that no previous chapter anticipated: the empty house, the akiya. Japan's population is shrinking and ageing, its countryside emptying, and millions of houses — rural farmhouses, suburban detached houses, urban machiya — stand empty, their owners dead or departed, their timber decaying. The empty house is the tradition's crisis in its starkest form: a building system designed for renewal, with no one left to renew it. Villages offer empty houses for nominal prices, cities debate demolition and reuse, and architects propose conversions — farmhouses as lodgings, machiya as studios, suburban houses as shared homes — that keep the fabric alive by finding new users.

The empty house also poses the tradition's deepest question: what is a house for, if not for a family? The Japanese house was built for a household that included grandparents, parents and children, its rooms flexible for generations, and the nuclear family, then the single household, then the empty house, have each shrunk its use. The contemporary answer — shared houses, multi-generational houses, houses that combine living and working — returns, in a new form, to the machiya's mixed use and the villa's sequence, and it suggests that the tradition's future lies

not in new forms but in new households for old forms. The empty house is a tragedy, but it is also an opportunity: a stock of timber houses, waiting for new lives, in a country that knows how to rebuild.

PART IV

Reception, Debate, and Reading

The last four chapters step back and outward: authenticity and earthquakes, the timber tradition today, the debated points flagged honestly, Japan's influence abroad, and the five-sign field method for reading any Japanese building in the street.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XV

Reception: Authenticity, Earthquakes, and the Timber Tradition Today

*Authenticity and Reconstruction**Earthquakes: The Tradition's Test**The Timber Tradition Today**Preservation Law and the Living Building**What Reception Teaches*



Photo: Raita, via Wikimedia Commons (CC BY 2.0). Source: https://commons.wikimedia.org/wiki/File%3AIsse_Grand_Shrine%2C_Mie_Prefecture%3B_November_2016_%2801%29.jpg

Authenticity and Reconstruction

The question that haunts Japanese architecture is the question of authenticity: what counts as original in a tradition that rebuilds? The Western conservation doctrine, codified in the Venice Charter of 1964, values original fabric — the actual stones, timbers and surfaces laid by the original builders — and treats reconstruction as a last resort, to be marked as new. The Japanese tradition, as this book has shown, values continuity of form, craft and ritual over continuity of material, and treats rebuilding as preservation. The two doctrines collided when Japan joined the World Heritage system, and the compromise, the Nara Document on Authenticity of 1994, drafted at a conference in Nara itself, broadened authenticity to include form, materials, function, tradition and spirit — a broadening that was, in effect, Japan's argument winning a hearing in international law.

The Nara Document did not settle the argument, and this book does not pretend otherwise. A rebuilt castle keep in concrete is not authentic by either doctrine, and it is labelled as a reconstruction; a rebuilt shrine in fresh cypress is authentic by the Japanese doctrine and questionable by the Western one, and it is presented as a living ritual; a restored temple, its timbers partly original and partly replaced, is authentic by both, in different degrees. The visitor's task is not to apply a single test but to ask, at each building, what was kept, what was changed, who decided and why — and to accept that the answer will differ from Ise to Himeji to Nakagin. Authenticity, in Japan, is a question to be asked, not a label to be applied.

Earthquakes: The Tradition's Test

If authenticity is the tradition's philosophical test, earthquakes are its physical one, and the tradition has passed it repeatedly — not by resisting earthquakes but by surviving them. The timber frame's flexibility, the pagoda's independent storeys, the stone wall's dry masonry, the house's light roof, all contribute to a building that moves rather than breaks, and the great temples' survival through centuries of earthquakes is evidence that the system works. The modern science of seismic design — flexible frames, dampers, base isolation, the whole apparatus of contemporary Japanese engineering — is that system formalised, and the base-isolated tower, which rides out shaking on bearings, is the pagoda's lesson in steel and rubber.

The test is not only structural but social. The earthquakes of 1923, 1995 and 2011 each destroyed buildings and each reshaped building law, and the 2011 Tohoku earthquake and tsunami, which killed nearly twenty thousand people, reshaped the coast itself, its seawalls, its relocation plans and its memorial architecture. Ban's paper shelters, Ando's memorials and the rebuilt towns of the Tohoku coast are the tradition's contemporary response to disaster, and they show the same pattern as the temple's rebuilding: destruction, mourning, and a rebuilding that is both practical and symbolic. The earthquake is, in the end, the tradition's permanent condition, and Japanese architecture is best understood as an architecture designed for a ground that moves.

The Timber Tradition Today

The timber tradition today is both threatened and revived. Threatened, because the carpenter's craft is shrinking: master carpenters are ageing, apprentices are fewer, plantation timber is weaker than old-growth, and the volume house builder's light frame, nailed and panelled, has replaced the joined frame in most new houses. The great temples' restoration workshops — at Horyu-ji, Todai-ji and Ise — keep the highest craft alive, but they are islands, and the ordinary carpenter's knowledge, once common, is now specialised. The craft's survival depends on training, on forestry and on demand, and all three are under pressure from cost, from concrete and from a housing market that values newness over craft.

Revived, because timber is also the material of the moment. Engineered timber — cross-laminated timber, glued laminated beams, timber-concrete hybrids — allows wooden buildings of a height and scale that traditional carpentry could not attempt, and Japan's forestry, its cedar plantations now mature, supplies the material. The most famous proposal, Sumitomo Forestry's W350, a concept for a 350-metre timber tower in Tokyo, is a proposal, not a project — this book states that plainly, because the tower is often reported as if it were being built — but it signals the direction: timber as a sustainable, carbon-storing alternative to concrete and steel, and the Japanese carpenter's knowledge, industrialised, as a resource for the climate age. The timber tradition's future may therefore lie not in the temple's restoration alone but in the tower's timber frame, and that is a future the tradition's founders could not have imagined.



Photo: Martin Falbisoner, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AHimeji_Castle%2C_November_2016_-02.jpg

Preservation Law and the Living Building

Japan's preservation system, established by the Law for the Protection of Cultural Properties of 1950, protects buildings as National Treasures and Important Cultural Properties, and districts as Preservation Districts for Groups of Traditional Buildings, with subsidies for repair and regulation of change. The system is comprehensive and, by international standards, generous, and it has saved temples, castles, machiya districts and villages that would otherwise have been lost. Its limitation is the same as the tradition's: it protects buildings, but buildings in Japan are processes, and a protected building that cannot be used, adapted or renewed will decay, however generous its subsidy. The system's best results come when protection is paired with use — a temple still worshipped in, a machiya still lived in, a castle still visited — and its worst when protection freezes a building into a monument that no one needs.

The living building is therefore the preservation system's real subject, and the examples in this book — Ise's ritual renewal, Himeji's replastering, the machiya's conversion to lodgings, the capsule tower's dispersal to museums — are all cases of a building living by changing. The preservationist's task in Japan is not to stop change but to guide it: to decide which changes keep a building alive and which kill it, and to accept that the answer will differ for a shrine, a castle, a townhouse and a tower. That task is never finished, because the buildings are never finished, and the tradition's health is measured not by how many buildings are frozen but by how many are still used, repaired and loved.

What Reception Teaches

Reception, in the end, teaches humility. The Western visitor who arrives expecting ancient buildings finds rebuilt ones; the visitor who expects a single Japanese style finds a field of positions, from shrine to capsule; the visitor who expects tradition and modernity to be enemies finds them entangled, in Taut's Katsura, in Ando's concrete, in Kuma's timber, in Ban's paper. The tradition's reception abroad — its influence on Wright, on Gropius, on the modern house worldwide — is part of its history, not an afterthought, and the next chapters follow that influence and its debates. The reader who has reached this chapter has the tools to judge that reception: the five signs, the glossary, the gazetteer, and the habit of asking, at each building, what was kept and what was changed.

The timber tradition's present condition can be stated plainly. Its great buildings survive, its craft survives in workshops and in engineered timber, its garden and tea disciplines survive in practice, and its contemporary masters are recognised worldwide. Its ordinary houses are threatened, its villages are emptying, and its most famous modern building has been demolished. Both halves of that sentence are true, and the tradition's future depends on whether the second half can be answered by the first — whether the craft, the masters and the disciplines that

survive can find new houses, new villages and new towers to build. That question is open, and it is the question with which this book's final chapters are concerned.



Photo: Svetlov Artem, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3ATokyo_Nakagin_capsule_tower_2019-04_4.jpg

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XVI

Debated Points: What We Do Not Know, and Why It Matters

Horyu-ji: How Old Is the Oldest Wood?

Katsura: Invention or Discovery?

Ise: Replica or Living Tradition?

The Pagoda's Pillar and the Capsule's Promise

How to Hold a Debate



Photo: ONO Masanobu, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AHoryu-ji_Kondo_and_Five-story_Pagoda_2022.jpg

Horyu-ji: How Old Is the Oldest Wood?

The first debated point is the one this book has flagged since Chapter III: the age of Horyu-ji. The temple's foundation in 607 rests on chronicles written later, its present buildings are dated by most scholars to the late seventh century, after a fire in 670, and the exact relationship between the original temple and its rebuilding — how much was reused, how much was new, whether the pagoda's timbers include seventh-century wood or are entirely later — is still argued by archaeologists and architectural historians. Dendrochronology, the dating of timbers by their tree rings, has refined the picture but not settled it, because reused timbers carry older dates than the buildings that contain them, and a single reused beam can mislead a whole chronology. The honest statement is that Horyu-ji's buildings are among the oldest wooden structures in the world, that their precise dates are debated within a range of decades, and that the debate itself is a sign of the tradition's health: a building worth arguing over is a building still alive in scholarship.

The debate matters because it affects how Horyu-ji is presented. A guidebook that states 607 as the pagoda's date misleads its readers, and a guidebook that dismisses the temple as a reconstruction misses its significance. The temple's value lies not in a single year but in its continuity: a site founded in the seventh century, rebuilt in the seventh century, maintained for fourteen centuries, whose present buildings carry the tradition's earliest forms. The visitor who understands that will see Horyu-ji not as a relic but as a record — a building that records, in its timbers, its joints and its repairs, the whole history of Japanese carpentry, from its beginnings to the present day.

Katsura: Invention or Discovery?

The second debated point is Katsura's modern fame. The villa's seventeenth-century origins are not in doubt, but its status as the essence of Japanese architecture, and as a model for modernism, is a twentieth-century construction, built by Taut, Gropius and their successors, and the question is whether they discovered Katsura's qualities or projected their own onto it. The evidence cuts both ways: Katsura's plain surfaces, modular plan and garden integration do resemble modernism, and Taut's reading was not fanciful; but Katsura's builders were aristocrats, not functionalists, and their plainness was taste, not theory, and the villa's fame has distorted its history by making it a prophecy. The debate is not about whether Katsura is beautiful — it is — but about what its beauty means, and whether a building can be both a seventeenth-century villa and a twentieth-century manifesto.

The debate matters because it affects how Katsura is restored and presented. A villa presented as modernism's ancestor will be photographed, restored and interpreted to emphasise its modern qualities — its planes, its modules, its emptiness — while a villa presented as a prince's retreat will emphasise its garden, its tea houses and its courtly life. Both presentations are partial, and the villa's managers, to their credit, present both, in their tours and their publications. The visitor who knows the debate will see the villa twice over: as a seventeenth-century retreat and as a twentieth-century mirror, and will understand that architectural fame is itself a historical force, shaping the buildings it celebrates.



Photo: Odd Roar Aalborg, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AThe_garden_around_the_Katsura_Rikyu_Imperial_Villa_in_Kyoto%2C_Japan.jpg

Ise: Replica or Living Tradition?

The third debated point is Ise, and it is the deepest, because it concerns not a date or a reading but the nature of authenticity itself. The Western conservation position — that a building rebuilt sixty times is a replica, however faithfully — and the Japanese position — that a building renewed by ritual is the most authentic of all — cannot both be fully right, and the Nara Document's compromise, broadening authenticity to include tradition and spirit, has not reconciled them. Critics of Ise argue that the rebuilding, however faithful, loses the patina, the wear and the historical evidence that original fabric carries, and that a shrine whose timbers are twenty years old cannot teach the history that a thousand-year-old timber could. Defenders argue that the craft, the ritual and the forest are the shrine's real fabric, and that a preserved but dead shrine would teach less.

The debate matters because it affects every rebuilding in Japan, from Himeji's plaster to the capsule tower's capsules. If Ise is a replica, then much of Japanese preservation is replication; if Ise is a living tradition, then much of Western preservation is mummification. The truth, as this book has argued throughout, is that both doctrines capture part of the matter, and that the wise visitor holds both: admiring Ise's craft and ritual while recognising that its timbers are new, and admiring a Western cathedral's ancient stones while recognising that its craft is dead. The debate has no winner, and that is its value: it forces every visitor to think about what preservation means, rather than accepting a label.

The Pagoda's Pillar and the Capsule's Promise

The fourth debated point concerns engineering and utopia. The pagoda's central pillar, the *shinbashira*, is popularly said to dampen earthquakes, and that claim is repeated in guidebooks, documentaries and museum labels around the world. Modern engineering, as Chapter III explained, finds the pillar's role subtler and possibly symbolic, and the debate between the popular story and the engineering evidence is a case study in how architectural legends form: a plausible mechanism, a striking building, and a story too good to check. The lesson is not that the legend is false — it may be partly true — but that a building's structural story should be checked against its structure, not against its fame, and that the pagoda's real earthquake resistance lies in its whole system, not in a single pillar.

The capsule's promise is the utopian counterpart. Metabolism promised that buildings would renew themselves part by part, and the Nakagin Capsule Tower's demolition in 2022 is taken, by some, as proof that the promise was false, and by others as proof that the promise was betrayed — by owners, by economics, by a society that preferred demolition to renewal. Both readings have force: the technology of capsule replacement

was harder than the theory, and the economics of renewal were never solved, but the tower's owners also never attempted the renewal the building was designed for, and its demolition was a choice, not a fate. The debate matters because it affects the contemporary interest in modular, replaceable buildings: if Nakagin failed, does modularity fail with it, or does it fail only when its economics and its governance fail? The contemporary masters' modular experiments — Ban's paper, Kuma's small parts, SANAA's free plans — are, in part, answers to that question, and their answers are still being tested.



Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0). Source: <https://commons.wikimedia.org/wiki/File%3ARyoan-ji-Garden-2018.jpg>

How to Hold a Debate

This chapter's purpose is not to leave the reader in doubt but to leave them equipped. A debated point is not a failure of knowledge but a sign that knowledge is alive, and the reader who can hold two views at once — Horyu-ji as seventh-century and as rebuilt, Katsura as villa and as manifesto, Ise as replica and as living tradition, the pagoda's pillar as damper and as symbol, the capsule as failure and as betrayal — is a better reader of buildings than the reader who demands a single answer. The habit this book has tried to teach — look at the joint, the threshold and the roof before reading the label — is also the habit for debates: look at the evidence, ask who decided, and accept that some questions remain open.

The final chapters return to the ground. The next chapter follows Japan's influence abroad, where its buildings and ideas were borrowed, translated and sometimes misunderstood, and the final chapter gives the reader the field method — the five signs — with which to test everything this book has claimed, in the street, in front of a real building, where debates are settled not by argument but by looking. That is the right ending for a book about an architecture of craft: the proof is not in the text but in the timber, and the reader is invited to go and look.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XVII

Japan Abroad: The Influence of Japanese Architecture

*Wright and the Imperial Hotel**Gropius, Taut, and the Modern House**The Tea House and the Garden Abroad**Japanese Architects Abroad**The Tradition's World*



Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AMarunouchiL%26_Tokyo_Station_1.jpg

Wright and the Imperial Hotel

Japan's influence abroad begins, for most Western readers, with Frank Lloyd Wright. Wright visited Japan in 1905, collected Japanese prints, and built the second Imperial Hotel in Tokyo, completed in 1923, a low, broad building of brick and carved stone, its plan open, its roofs low, its ornament derived from Japanese geometry. The hotel survived the Great Kanto earthquake of 1923, which struck on its opening day, and its survival became a legend in both countries — Wright's floating foundations, his broad mass and his flexible structure credited with saving it, though later engineers have qualified the story. The hotel was demolished in 1968, its entrance hall preserved at the Meiji-mura museum, and its loss is still mourned as the loss of a synthesis: a Western architect's Japanese building, in Japan, for the world.

Wright's debt to Japan is debated, as all influence is, but its broad lines are clear. His Prairie houses — low roofs, open plans, central hearths, garden rooms, horizontal lines — share their spatial logic with the Japanese house, and his writings acknowledge the debt, particularly to the Japanese print's flat planes and the Japanese house's open interior. Whether Wright borrowed forms or principles is the interesting question, and the answer is probably principles: the open plan, the garden room and the horizontal line are Japanese ideas that Wright made American, and through Wright, they entered the modern house worldwide. The Imperial Hotel's demolition, and the preservation of its entrance hall, is the influence story in miniature: a building lost, a fragment saved, and an idea — the open, garden-centred house — surviving in millions of houses that never heard of Wright or Japan.

Gropius, Taut, and the Modern House

The second channel of influence runs through the modern movement's German wing. Bruno Taut's Katsura, described in Chapter VI, and Walter Gropius's visit in 1954, made the Japanese house a model for the modern house, and their writings — Taut's books on Japanese art and architecture, Gropius's praise of Katsura's modularity and honesty — shaped the postwar house in Europe and America. The post-and-beam frame, the sliding wall, the open plan and the garden room of mid-century modernism, from the Case Study Houses of California to the houses of Scandinavia, owe something to that model, filtered through the Bauhaus and through the American architects who had seen Japan. The influence is diffuse, which is why it is hard to prove in any single building, but it is pervasive, which is why it matters.

The influence also ran in the other direction, and the postwar Japanese masters were aware of it. When Tange built Yoyogi, when Kurokawa built Nakagin, when Ando built the Church of the Light, they were building for a world that already knew Japanese space through Wright and Gropius, and their buildings' reception abroad was shaped by that knowledge. The circle is complete: Japan gave the West its house, the West gave Japan its modernism, and the contemporary masters work in a world where the two are already mixed. The reader who sees a glass house in California, a timber house in Scandinavia or a courtyard house in Australia is seeing, in part, Japan abroad, whether the architect knew it or not.

The Tea House and the Garden Abroad

The tea house and the garden travelled more literally than the house. Tea houses were built in botanical gardens, museums and parks around the world — in Kyoto's sister cities, in the Japanese gardens of Portland, Seattle and London, in the museum gardens of Berlin and Paris — often by Japanese craftsmen, using Japanese timber and joinery, as gifts and as cultural diplomacy. The gardens, too, travelled: dry gardens of raked gravel and rocks, stroll gardens of ponds and bridges, courtyard gardens of stone and moss, built by Japanese gardeners and their pupils in climates far from Kyoto's. The best of these gardens, like the Portland Japanese Garden, are serious works, maintained with Japanese discipline; the worst are stage sets, rocks and lanterns without composition, and the difference between them is the difference between architecture and decoration that this book has insisted on throughout.

The garden abroad poses the authenticity question in a new form. A dry garden in Portland, built by Japanese craftsmen with Oregon rocks, is it Japanese architecture or American architecture in a Japanese style? The garden's designers would say it is both: Japanese in its grammar, American in its materials and its climate, and its success lies in that combination, not in its fidelity to Kyoto. The same is true of the tea house abroad: a tea house built in London for the tea ceremony is a Japanese building in London, and its use — tea served in it by a tea school — makes it more Japanese than a tea house in Kyoto preserved as a museum. Influence, at its best, is not copying but translation, and the tea house and garden abroad are the tradition's most successful translations.

Japanese Architects Abroad

The contemporary masters have carried the tradition abroad in their own persons. Ando's museums in America and Europe, Kuma's pavilions and houses in France, China and Australia, SANAA's museums in France and America, Ban's shelters and museums on every continent, are Japanese buildings in foreign places, and their reception shows how the tradition travels. Ando's concrete, which reads as Japanese discipline in Osaka, reads as minimalism in Texas; Kuma's timber, which reads as craft in Asakusa, reads as warmth in Paris; SANAA's glass, which reads as openness in Kanazawa, reads as transparency in Lens. The buildings do not change, but their meanings do, and that change is itself a lesson: architecture's meaning is not only in its form but in its place, and a Japanese building abroad is a different building from the same design in Japan.

The masters' foreign work also shows the tradition's limits. A concrete church in Osaka and a concrete museum in Texas share a material but not a climate, a craft base or a ritual, and the translation is never exact. The best foreign buildings by Japanese architects acknowledge that: they adapt their materials to local craft, their plans to local use, and their gardens to local climate, while keeping the discipline — the light, the void, the small part, the paper — that makes them Japanese. The worst, by any architect, impose a form without adapting it, and they fail in any country. The influence story's moral is therefore the same as the book's: look at the joint, the threshold and the roof, and ask whether the building belongs to its place, wherever that place is.



Photo: Rs1421, via Wikimedia Commons (CC BY-SA 3.0). Source: <https://commons.wikimedia.org/wiki/File:Yoyogi-National-First-Gymnasium-01.jpg>

The Tradition's World

Japan abroad is now a world, not a channel. Japanese architecture is taught in schools on every continent, its gardens are built in cities from Portland to Paris, its masters build on every continent, and its ideas — the open plan, the garden room, the timber frame, the paper screen, the capsule, the void — are part of the common language of contemporary architecture, whether their Japanese origin is acknowledged or not. That diffusion is the tradition's triumph and its risk: triumph, because its ideas have proved universal; risk, because diffusion without understanding produces pastiche — the pagoda roof on a restaurant, the torii gate on a garden centre, the rock garden without composition. The tradition's world is therefore a field of both serious work and kitsch, and the reader's task, abroad as in Japan, is to distinguish them.

The distinction, as always, is craft and composition. A serious Japanese-inspired building, wherever it stands, will show the discipline this book has described: a module, a joint, a threshold, a garden composed with the building, a material honestly used. A pastiche will show only the

signs — a roof, a gate, a lantern — without the system. The five signs of the final chapter are therefore not only a guide to Japan but a guide to the world, and the reader who has learned them in Kyoto can apply them in California, in Paris or in their own street. That portability is the tradition's gift, and it is the right preparation for the field method that follows.

Plate VII — The Joan Tea House, Urakuen



Photo: Lombroso, via Wikimedia Commons (Public domain). Source: https://commons.wikimedia.org/wiki/File%3AUrakuen_Joan.jpg

The Joan tea house at Urakuen, Inuyama, a National Treasure tea house of the early seventeenth century — four and a half mats, a low crawl-through entrance, and the whole discipline of tea in a room the size of a cupboard.

Plate VIII — Gion at Night, Kyoto



Photo: lumoplank, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3AStreets_of_Gion%2C_Kyoto_-_Gion7708.jpg

Gion at night, its machiya fronts shuttered in timber lattice and lamplight — the merchant city after the shops have closed, when the street itself becomes the building's second room.

Plate IX — Matsumoto Castle



Photo: Lightning toothed whale, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3AMatsumoto_Castle_Keep_Tower.jpg

The black Crow Castle at Matsumoto, its six-storey keep rising over its moat — the castle as fortress and as theatre, its dark plaster and white trim a deliberate counterpoint to Himeji's white.

Plate X — The Nakagin Capsule Tower, Tokyo, in 2019



Photo: Svetlov Artem, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3ATokyo_Nakagin_capsule_tower_2019-04_4.jpg

Kisho Kurokawa's Nakagin Capsule Tower of 1972, its concrete cores carrying 140 bolted-on living capsules — Metabolism's most famous building, photographed in 2019, three years before its demolition.

Plate XI — The Church of the Light, Ibaraki



Photo: Bujatt, via Wikimedia Commons (CC BY-SA 2.5). Source: https://commons.wikimedia.org/wiki/File%3AChurch_of_Light.JPG

Tadao Ando's Church of the Light of 1989, its concrete wall cut by a cross of daylight — the building that made Ando's name, and the purest statement of his architecture of light and shadow.

Plate XII — Inside the Asakusa Culture Tourist Information Center



Photo: Filbustler, via Wikimedia Commons (CC BY 4.0). Source: https://commons.wikimedia.org/wiki/File%3AAsakusa_Culture_Tourist_Information_Center_21_09_2024_Picture_01.jpg

Inside Kengo Kuma's Asakusa Culture Tourist Information Center of 2012, its timber ceiling and faceted wall carrying the district's rooflines indoors — the contemporary master working, as ever, through wood.

ARCHITECTURAL HISTORY SERIES · BOOK XXIX

XVIII

Reading a Japanese Building: Five Signs

How to Use the Five Signs

1. *The Deep Eave and the Roof*

2. *The Post-and-Beam Frame*

3. *The Sliding Screen Wall*

4. *The Garden as a Room*

5. *The Threshold Sequence*

Reading, and Going On



Photo: Reggaeman, via Wikimedia Commons (Public domain). Source: https://commons.wikimedia.org/wiki/File%3AHimeji_Castle_The_Keep_Towers.jpg

1. The deep eave and the roof



Photo: Reggaeman, via Wikimedia Commons (Public domain). Source: https://commons.wikimedia.org/wiki/File%3AHimeji_Castle_The_Keep_Towers.jpg

Look at the top of the building: does a great roof, its eaves deep enough to walk beneath, dominate the whole composition? Japanese roofs are not hats on a box but the building's main event — tiled, thatched or barked, sweeping low over the walls and throwing deep shadow over the veranda.

Limit: Deep eaves occur in many rainy climates, and a tiled roof alone proves nothing; the test is the proportion — the roof's weight against the walls' lightness — and the bracket work beneath it.

2. The post-and-beam frame



Photo: lumoplank, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File:%3ATakayama%2C_Part_II_-_Takayama6392.jpg

Look for the posts: a regular rhythm of timber columns, standing on stone footings and carrying the roof on beams, with the walls hung between them rather than carrying anything. If you can see the frame — posts, beams, brackets — and the walls read as screens, you are looking at the timber tradition.

Limit: Timber frames occur worldwide, and a post-and-beam building in Japan may be a modern imitation: check the joints, the module and the date, and remember that concrete buildings now imitate the frame's rhythm.

3. The sliding screen wall



Photo: Benh LIEU SONG from Torcy, France, via Wikimedia Commons (CC BY-SA 2.0). Source: https://commons.wikimedia.org/wiki/File%3ATatami_Alcove_%2845063444665%29.jpg

Look for walls that move: shoji of paper and lattice, fusuma of opaque paper, rain shutters that slide away by day. A Japanese room is defined by screens, not by walls, and the same space can be one room or three, open to the garden or closed against the winter, according to the season and the hour.

Limit: Sliding doors are now common everywhere, and a paper screen alone does not make a building Japanese: the test is the whole system — the module, the threshold, the garden it opens to.

4. The garden as a room



Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0). Source: <https://commons.wikimedia.org/wiki/File%3ARyoan-ji-Garden-2018.jpg>

Look for the garden treated as architecture: rocks placed as carefully as columns, gravel raked like a floor, a pond positioned to be seen from a single seated viewpoint. The garden is not the building's setting but its next room, entered by stepping stones and framed by the veranda.

Limit: Gardens accompany houses everywhere, and a rock garden alone — especially outside Japan — may be decoration rather than architecture: ask whether the building's plan was composed with the garden, or the garden added after.

5. The threshold sequence



Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3ANezu_Museum_Garten-20091020-RM-113550.jpg

Follow the approach: gate, path, stepping stones, a change of level, a low entrance, a turn that hides the destination until the last step. Japanese architecture choreographs arrival, and a building that gives itself away at once — no gate, no turn, no threshold — is working against the tradition.

Limit: Threshold sequences occur in temples and villas worldwide, and a winding path alone proves little: the test is the whole choreography, from the street to the innermost room, and how each threshold changes light, sound and footing.

How to Use the Five Signs

This final chapter is a field method, not a conclusion. It gives five signs by which any Japanese building can be read in the street, each with what to look for and with its limit — because a sign without its limit is a slogan, not a method. The signs are drawn from the whole book: the roof from the temples and castles, the frame from the carpenter's system, the screen from the house, the garden from the villa, the threshold from the shrine and the tea house. Together they are a way of looking, not a checklist for labelling: a building that shows all five signs is certainly in the tradition, a building that shows one is possibly, and a building that shows none is probably not, however Japanese its roof may look in a photograph.

A practical note before the signs: date the building first. A timber-framed, tiled building from 1609 and one from 2009 may look alike in a photograph, but their construction, their services and their social programme are entirely different, and only the earlier building can be Japanese in a historical sense. Check the plaque, the listing, the guidebook or the local history, and ask who built it, for whom, and with what materials, before applying the signs. The signs are a way of looking, not a way of dating, and they work best when combined with the building's history, which the earlier chapters of this book provide for the tradition's great buildings and its masters.

1. The Deep Eave and the Roof

Look at the top of the building: does a great roof, its eaves deep enough to walk beneath, dominate the whole composition? Japanese roofs are not hats on a box but the building's main event — tiled, thatched or barked, sweeping low over the walls and throwing deep shadow over the veranda. At Himeji, the tiered roofs compose the castle's silhouette; at a farmhouse, the thatched roof is the house's bulk; at a tea house, the low roof is its humility. The roof's weight against the walls' lightness is the tradition's most visible proportion, and it is the first thing to look for.

Limit: deep eaves occur in many rainy climates, and a tiled roof alone proves nothing. The test is the proportion — the roof's weight against the walls' lightness — and the bracket work beneath it, which shows whether the roof is carried by the frame, as in the tradition, or by the walls, as in most other architectures.

2. The Post-and-Beam Frame

Look for the posts: a regular rhythm of timber columns, standing on stone footings and carrying the roof on beams, with the walls hung between them rather than carrying anything. If you can see the frame — posts, beams, brackets — and the walls read as screens, you are looking at the timber tradition. In a temple, the frame is monumental; in a house, it is domestic; in a tea house, it is rustic; but the rhythm is the same, and it is the rhythm that gives Japanese interiors their calm, regular beat.

Limit: timber frames occur worldwide, and a post-and-beam building in Japan may be a modern imitation. Check the joints, the module and the date, and remember that concrete buildings now imitate the frame's rhythm, as Ando's concrete and Kuma's timber screens both do, in different materials.



Photo: lumoplank, via Wikimedia Commons (CC0). Source: https://commons.wikimedia.org/wiki/File%3ATakayama%2C_Part_JL_-_Takayama6392.jpg

3. The Sliding Screen Wall

Look for walls that move: shoji of paper and lattice, fusuma of opaque paper, rain shutters that slide away by day. A Japanese room is defined by screens, not by walls, and the same space can be one room or three, open to the garden or closed against the winter, according to the season and the hour. The test is physical: can the wall be opened, and does opening it change the room's size, light and relationship to the garden? If it can, and it does, the building is working in the tradition.

Limit: sliding doors are now common everywhere, and a paper screen alone does not make a building Japanese. The test is the whole system — the module, the threshold, the garden it opens to — and a screen without a garden to open to is decoration, not architecture.



Photo: Benh LIEU SONG from Torcy, France, via Wikimedia Commons (CC BY-SA 2.0). Source: https://commons.wikimedia.org/wiki/File%3ATatami_Alcove_%2845063444665%29.jpg

4. The Garden as a Room

Look for the garden treated as architecture: rocks placed as carefully as columns, gravel raked like a floor, a pond positioned to be seen from a single seated viewpoint. The garden is not the building's setting but its next room, entered by stepping stones and framed by the veranda. At Ryoan-ji, the garden is a room for contemplation; at Katsura, it is a landscape for walking; at a machiya, it is a pocket of sky in a deep plan. In each case, the garden and the building were composed together, and neither makes sense without the other.

Limit: gardens accompany houses everywhere, and a rock garden alone — especially outside Japan — may be decoration rather than architecture. Ask whether the building's plan was composed with the garden, or the garden added after, and whether the garden is seen from the building's principal rooms or only from its car park.



Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0). Source: <https://commons.wikimedia.org/wiki/File%3ARyoan-ji-Garden-2018.jpg>

5. The Threshold Sequence

Follow the approach: gate, path, stepping stones, a change of level, a low entrance, a turn that hides the destination until the last step. Japanese architecture choreographs arrival, and a building that gives itself away at once — no gate, no turn, no threshold — is working against the tradition. The shrine's torii, the tea house's roji, the villa's garden path and the castle's gates are all versions of the same idea: that arrival should take time, change your footing and your attention, and prepare you for what is inside.

Limit: threshold sequences occur in temples and villas worldwide, and a winding path alone proves little. The test is the whole choreography, from the street to the innermost room, and how each threshold changes light, sound and footing — and whether the sequence ends in a room, a garden or a view that rewards the walk.



Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0). Source: https://commons.wikimedia.org/wiki/File%3ANezu_Museum_Garten-20091020-RM-113550.jpg

Reading, and Going On

Put the signs together, and a method emerges. Stand before a building and ask, in order: what does its roof do? Can you see its frame? Do its walls move? Is its garden a room? Does its approach choreograph your arrival? A building that answers yes to all five is in the tradition's heart; a building that answers yes to three is in its orbit; a building that answers yes to one is borrowing a sign, not a system. The method's value lies not in the score but in the looking: each question forces you to notice something — a bracket, a screen, a stone, a step — that you would otherwise have walked past, and that noticing is the point of the whole book.

The book ends, therefore, not with a monument but with an invitation. Go to Ise, to Horyu-ji, to Himeji, to Gion, to Katsura, to Ryooan-ji, to a tea house, to a museum by Ando or Kuma or SANAA or Ban, and look — at the joint, the threshold and the roof, at the screen, the garden and the path — before reading any label. The tradition will reward that looking, because it was built for it: a carpenter's architecture, made to be seen in its making, a garden architecture, made to be walked, and a small-room architecture, made to be sat in. The five signs are a beginning, not an end, and the buildings themselves, as always in Japan, are the final authority.

Timeline: The Style in Dates

c. 607	Horyu-ji is founded at Ikaruga, by tradition, by Prince Shotoku — its golden hall and pagoda, rebuilt after a fire in the late seventh century, are among the oldest wooden buildings on earth.
710	The capital moves to Nara, and the great state temples rise: Todai-ji, Horyu-ji's neighbour in the plain, becomes the centre of a Buddhist state.
752	The Great Buddha at Todai-ji is dedicated, its bronze figure housed in a hall that remains, even rebuilt, one of the largest wooden buildings in the world.
794	The capital moves to Kyoto, which remains the imperial capital for more than a thousand years and the centre of the townhouse, garden and tea-house traditions.
1185	The Kamakura shogunate begins, and the warrior taste reshapes temple and house building toward plainer, more massive timber work.
1397	The Golden Pavilion at Rokuon-ji, Kyoto, is built as a shogun's villa, later becoming the Zen temple that still crowns the city's northern hills.
1576	Oda Nobunaga begins Azuchi Castle, the first great castle of the unification age, setting the pattern of the towering keep that Himeji and Matsumoto perfect.
1603	The Tokugawa shogunate is established at Edo, and the long peace that follows fills Japan with castle towns, merchant streets and, in Kyoto, the machiya.
1609	Himeji Castle's keep complex is completed, the White Heron in plaster and tile over great stone walls — the finest surviving Japanese castle.
c. 1620	Work begins at Katsura Imperial Villa in Kyoto for Prince Toshihito, extended by his son — the villa that later becomes the modern world's image of Japanese architecture.
c. 1499	The dry garden at Ryoan-ji in Kyoto takes its present form in the late fifteenth century — fifteen rocks in raked gravel, still unexplained and still argued over.
1853	Commodore Perry's ships arrive, and the forced opening of Japan begins the Western encounter that transforms its architecture within a generation.
1868	The Meiji Restoration returns the emperor to power and launches the building of a Western-style state: ministries, stations, banks and schools in brick and stone.
1877	The British architect Josiah Conder arrives to teach Western architecture in Tokyo, training the first generation of Japanese architects, including Tatsuno Kingo.
1891	The Nobi earthquake kills thousands and destroys timber and brick buildings alike, beginning Japan's long science of earthquake-resistant design.
1914	Tokyo Station opens, Tatsuno Kingo's red-brick Marunouchi building — the Meiji state's railway cathedral, restored to its original domes in 2012.
1923	The Great Kanto earthquake devastates Tokyo and Yokohama, destroying much of the brick city and pushing Japanese building toward reinforced concrete.
1933	Bruno Taut, exiled from Germany, visits Katsura and proclaims it a model for modern architecture — a reading that shapes the villa's fame ever since.

1945	Japan's cities lie in ruins, and the postwar rebuilding begins — first in concrete and steel, then, in the 1960s, in the experimental forms of Metabolism.
1960	The Metabolist manifesto is published at the Tokyo World Design Conference, and Kenzo Tange unveils his Plan for Tokyo Bay — the city as a living organism.
1964	Tange's Yoyogi National Gymnasium opens for the Tokyo Olympics, its suspended roofs carrying Japanese timber curves into concrete and steel.
1972	Kisho Kurokawa's Nakagin Capsule Tower is completed in Ginza, its 140 capsules bolted to two concrete cores — Metabolism's most famous building.
1989	Tadao Ando's Church of the Light is completed at Ibaraki, its concrete wall cut by a cross of daylight.
1993	Horyu-ji and Himeji Castle are inscribed on UNESCO's World Heritage List, the first Japanese inscriptions for architecture.
1994	The Historic Monuments of Ancient Kyoto are inscribed by UNESCO, protecting seventeen sites including Katsura, Ryōan-ji and Kiyomizu-dera.
1995	The Great Hanshin earthquake devastates Kobe, and Shigeru Ban builds his Paper Church for the displaced — paper tubes as structure, not symbol.
2004	SANAA's 21st Century Museum of Contemporary Art opens in Kanazawa, a glass circle with no front or back, open to the city on every side.
2010	Kazuyo Sejima and Ryue Nishizawa of SANAA receive the Pritzker Architecture Prize.
2013	Ise is rebuilt for the sixty-second time in its recorded cycle, the shrine's timber renewed in the twentieth year as it has been for centuries.
2014	Shigeru Ban receives the Pritzker Architecture Prize for his disaster-relief architecture and his paper structures.
2019	Kengo Kuma's Japan National Stadium opens for the Tokyo Olympics, its timber lattice eaves recalling the pagoda and the shrine.
2022	The Nakagin Capsule Tower is demolished, its capsules dispersed to museums — Metabolism's promise of renewal ending in preservation by fragment.

Gazetteer: Where to See the Style

Ise — the Grand Shrine	The Inner and Outer Shrines at Ise in Mie Prefecture, rebuilt in fresh cypress every twenty years on alternating plots — the shrine precinct, its gravel courts and its forest, are the experience; the inner sanctuaries themselves are not open to visitors.
Ikaruga — Horyu-ji	The temple complex at Ikaruga near Nara, its golden hall and five-storey pagoda among the oldest wooden buildings on earth, with the great treasure hall of Buddhist sculpture beside them.
Nara — Todai-ji	The Great Buddha Hall at Todai-ji, rebuilt in 1709, housing the Great Buddha of 752, with the great south gate and its guardian figures on the approach.
Miyajima — Itsukushima Shrine	The shrine on the island of Miyajima, its vermilion torii standing in the sea, its corridors built over the water so that the shrine seems to float at high tide.
Himeji — Himeji Castle	The White Heron Castle, its keep complex, walls, moats and baileys intact and restored, the finest surviving Japanese castle and the best place to understand castle planning.
Matsumoto — Matsumoto Castle	The black Crow Castle in Nagano, its six-storey keep over its moat, with the moon-viewing turret added in peacetime — castle as fortress and as pleasure house.
Kyoto — Gion and the machiya districts	The preserved districts of Gion, Sannenzaka and the machiya streets of central Kyoto, where timber-lattice townhouses still line the streets, many now shops, restaurants and lodgings.
Kyoto — Katsura Imperial Villa	The imperial villa in western Kyoto, visited by guided tour only, its shoin buildings, tea houses and stroll garden composed as one work — book well ahead.
Kyoto — Ryoan-ji and Kiyomizu-dera	The dry garden at Ryoan-ji, fifteen rocks in raked gravel behind an earthen wall, and the great stage of Kiyomizu-dera over the eastern hills, both among Kyoto's UNESCO sites.
Kanazawa — Kenrokuen and the 21st Century Museum	Kenrokuen, one of Japan's three great gardens, with its ponds, pines and winter rope-work, facing SANAA's glass-circle museum across the park — old and new garden architecture in one walk.
Tokyo — Tokyo Station and Yoyogi	Tatsuno's brick Marunouchi station, restored to its 1914 domes, and Tange's Yoyogi National Gymnasium in Shibuya, its suspended roofs still the most dramatic roofs in the city.
Tokyo — the Nakagin site and Asakusa	The Nakagin Capsule Tower is gone, demolished in 2022, its site in Ginza now without it; Kuma's Asakusa Culture Tourist Information Center stands in Asakusa, its stacked roofs and timber interior open to visitors.
Ibaraki — the Church of the Light	Ando's church at Ibaraki in Osaka Prefecture, its concrete chapel lit by a cross cut in the wall — small, plain and still startling.
Kobe — the Paper Church site	The Paper Church built by Shigeru Ban after the 1995 earthquake was later moved to Taiwan; in Kobe, the Earthquake Memorial and the rebuilt city carry the same story of disaster and renewal.

Key Figures

Sen no Rikyu (1522–1591)	Tea master who fixed the discipline of tea and the architecture of the tea house: small, dark, plain, entered on one's knees — the wabi-sabi ideal made into a room.
Josiah Conder (1852–1920)	British architect who taught Western architecture in Tokyo from 1877 and trained the first generation of Japanese architects, including Tatsuno Kingo.
Tatsuno Kingo (1854–1919)	Conder's pupil and architect of Tokyo Station (1914), whose red brick and domes became the public face of the Meiji state.
Bruno Taut (1880–1938)	German modernist who, in exile in Japan in the 1930s, proclaimed Katsura Imperial Villa a model for modern architecture — a reading debated ever since.
Kenzo Tange (1913–2005)	Architect of the Hiroshima Peace Memorial Park and the Yoyogi National Gymnasium, and the senior figure of Metabolism, whose Tokyo Bay Plan imagined the city as a growing organism.
Kisho Kurokawa (1934–2007)	Metabolist architect of the Nakagin Capsule Tower (1972) and the Sony Tower, who argued that buildings, like living things, should grow, change and be replaced part by part.
Fumihiko Maki (1928–2024)	Metabolist architect of Hillside Terrace in Tokyo, who tempered the movement's megastructures with a quieter architecture of grouping, layering and the in-between.
Arata Isozaki (1931–2022)	Architect and theorist of Japan-ness, whose essays on Ise, Todai-ji and Katsura argued that Japanese architecture is a series of reinterpretations, not a single essence.
Tadao Ando (born 1941)	Self-taught architect of the Church of the Light (1989) and the Row House at Sumiyoshi, who made exposed concrete, light and shadow into a Japanese architecture of the void.
Kengo Kuma (born 1954)	Architect of the Nezu Museum, the Asakusa Culture Tourist Information Center and the Japan National Stadium, who works through wood, lattice and small parts rather than monumentality.
Kazuyo Sejima (born 1956) and Ryue Nishizawa (born 1966)	Founders of SANAA, architects of the 21st Century Museum of Contemporary Art in Kanazawa (2004) and joint winners of the 2010 Pritzker Prize, whose glass circles dissolve the wall itself.
Shigeru Ban (born 1957)	Architect of the Paper Church in Kobe (1995) and the Cardboard Cathedral in Christchurch (2013), winner of the 2014 Pritzker Prize, who made paper tubes into structure for disaster relief and for museums alike.

Glossary

Ken	The module of Japanese timber building: the bay between two posts, traditionally about six feet, from which room sizes and whole plans are counted.
Tatami	The straw mat, roughly one by two metres, that measures a Japanese room: rooms are described by their mat count — four and a half, six, eight — rather than by metres.
Shoji	A sliding screen of translucent paper on a timber lattice, admitting diffused light and dividing rooms that can be opened into one.
Fusuma	A sliding screen of opaque paper, often painted, that closes a room or divides it, removed in summer to open the house to the garden.
Engawa	The veranda running around a Japanese house, between room and garden — a corridor, a seat and a threshold in one, neither inside nor outside.
Tokonoma	The alcove in a reception room where a hanging scroll and a flower arrangement are displayed — the room's spiritual centre and its measure of formality.
Shoin	The formal reception style of the samurai house: tatami, tokonoma, staggered shelves and a writing desk bay, later the basis of the sukiya villa.
Sukiya	The refined, tea-influenced style of the villa and tea house: plain wood, natural materials and studied rusticity, named for the tea master's hut.
Wabi-sabi	The aesthetic of quiet imperfection: worn, plain and asymmetrical things valued for their age, use and incompleteness, central to the tea house.
Karesansui	The dry garden: rocks, gravel and moss composed as landscape in miniature, raked into patterns of water and waves, most famously at Ryoan-ji.
Roji	The dewy path: the garden path to a tea house, of stepping stones, lanterns and a water basin, designed to slow and cleanse the guest before tea.
Chashitsu	The tea house: a small room, often four and a half mats, built for the tea ceremony, entered through a low crawl-through door that humbles every guest alike.
Torii	The gate of two posts and two crossbeams marking the entrance to a shrine precinct — vermilion at Itsukushima, plain cypress at Ise.
To	The pagoda: a tower of three, five or seven storeys derived from the Indian stupa, its central pillar and stacked roofs adapted to Japanese timber craft.
Daibutsuden	The Great Buddha Hall: the hall housing a colossal Buddha figure, at Todai-ji the largest wooden building of its kind in Japan.
Minka	The traditional farmhouse and town house of commoners, built by local carpenters in regional styles — thatched, tiled or barked according to place.
Machiya	The merchant townhouse of Kyoto and other cities: narrow frontage, deep plan, shop at the front, living rooms behind, and a small courtyard garden.
Gassho-zukuri	The steep thatched farmhouse of Shirakawa-go, its great roof like hands in prayer, built to shed the region's heavy snow.
Shinbashira	The central pillar of a pagoda, traditionally said to steady the tower in earthquakes — a claim modern engineers debate, as this book explains.

Tsugite and shiguchi	The joinery of Japanese carpentry: the splices and joints that connect timbers without nails, cut so precisely that a joint can be assembled and taken apart.
Shakkei	Borrowed scenery: the garden technique of framing a distant mountain or landscape as part of the garden's composition.
Ma	The interval: the meaningful pause or void between things — between posts, between rocks, between sounds — that gives Japanese space its rhythm.
Metabolism	The postwar movement, launched in 1960, that treated buildings and cities as living organisms: permanent cores carrying replaceable capsules, rooms and parts.
Capsule	The replaceable living unit of Metabolism, prefabricated and bolted to a core — most famously the 140 capsules of the Nakagin Capsule Tower.

Sources & Bibliography

Sources consulted

- UNESCO — Historic Monuments of Ancient Kyoto — <https://whc.unesco.org/en/list/688>
- UNESCO — Himeji-jo — <https://whc.unesco.org/en/list/661>
- UNESCO — Buddhist Monuments in the Horyu-ji Area — <https://whc.unesco.org/en/list/660>
- Japan National Tourism Organization — <https://www.japan.travel/en/>

Bibliography

- Nishi, Kazuo, and Kazuo Hozumi. What is Japanese Architecture? Kodansha International, 1985.
- Young, David, and Michiko Young. The Art of Japanese Architecture. Tuttle, 2007.
- Isozaki, Arata. Japan-ness in Architecture. MIT Press, 2006.
- Coaldrake, William H. Architecture and Authority in Japan. Routledge, 1996.
- Stewart, David B. The Making of a Modern Japanese Architecture: 1868 to the Present. Kodansha International, 1987.
- Kurokawa, Kisho. Metabolism in Architecture. Studio Vista, 1977.
- Lin, Zhongjie. Kenzo Tange and the Metabolist Movement: Urban Utopias of Modern Japan. Routledge, 2010.

Illustration Credits

Cover: artwork @ World Arch Journal (a design, not a period photograph). All photographs are reproduced from Wikimedia Commons under the licences stated below. No image has been cropped; each is shown whole, as published by its author.

- Tadao Ando — Photo: Christopher Schriener, via Wikimedia Commons (CC BY-SA 2.0).
https://commons.wikimedia.org/wiki/File%3ATadao_Ando_2004.jpg
- Inside the Asakusa Center — Photo: Flibustier, via Wikimedia Commons (CC BY 4.0).
https://commons.wikimedia.org/wiki/File%3AAsakusa_Culture_Tourist_Information_Center_21_09_2024_Picture_01.jpg
- The Church of the Light, Interior — Photo: Bujatt, via Wikimedia Commons (CC BY-SA 2.5).
https://commons.wikimedia.org/wiki/File%3AChurch_of_Light.JPG
- A Gion Street — Photo: lumoplank, via Wikimedia Commons (CC0).
https://commons.wikimedia.org/wiki/File%3AStreets_of_Gion%2C_Kyoto_-_Gion7712.jpg
- Himeji Castle — Photo: Gilles Desjardins, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AHimeji_Castle_Japan.jpg
- Himeji Castle Across the Moat — Photo: Martin Falbisoner, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AHimeji_Castle%2C_November_2016_-02.jpg
- Horyu-ji, Ikaruga — Photo: ONO Masanobu, via Wikimedia Commons (CC0). https://commons.wikimedia.org/wiki/File%3AHoryu-ji_Kondo_and_Five-story_Pagoda_2022.jpg
- Approach to the Inner Shrine, Ise — Photo: z tanuki, via Wikimedia Commons (CC BY 3.0).
https://commons.wikimedia.org/wiki/File%3Aise_grand_shrine_Naiku_%2C_%E4%BC%8A%E5%8B%A2%E7%A5%9E%E5%AE%AE%E5%86%85%9A_panoramio_%281%29.jpg
- The Torii at Ise — Photo: Raita, via Wikimedia Commons (CC BY 2.0).
https://commons.wikimedia.org/wiki/File%3Aise_Grand_Shrine%2C_Mie_Prefecture%3B_November_2016_%2801%29.jpg
- The Torii at Itsukushima — Photo: Balon Greyjoy, via Wikimedia Commons (CC0).
https://commons.wikimedia.org/wiki/File%3A20181111_Itsukushima_Shrine_torii-1.jpg
- Inside the Kanazawa Museum — Photo: Keemz, via Wikimedia Commons (CC BY 2.0).
https://commons.wikimedia.org/wiki/File%3AKanazawa_21st_Century_Museum.jpg
- The Garden at Katsura Imperial Villa — Photo: Odd Roar Aalborg, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AThe_garden_around_the_Katsura_Rikyu_Imperial_Villa_in_Kyoto%2C_Japan.jpg
- The Garden Pond at Katsura — Photo: Renehaas, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AKatsura_Villa%2C_Kyoto_Tenbashi.jpg
- Stone Basin in the Katsura Garden — Photo: Renehaas, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AKatsura_Villa%2C_Kyoto_%281%29.jpg
- Winter Rope-Work at Kenrokuen — Photo: Winniepix, via Wikimedia Commons (CC BY 2.0).
https://commons.wikimedia.org/wiki/File%3AKenrokuen_Garden%2C_Kanazawa_%2853621201294%29.jpg
- The Stage at Kiyomizu-dera — Photo: Martin Falbisoner, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AKiyomizu-dera%2C_Kyoto%2C_November_2016_-01.jpg
- The Sony Tower, Ginza — Photo: Bigjap, via Wikimedia Commons (CC0). <https://commons.wikimedia.org/wiki/File%3AKUROKAWA-Sony.jpg>
- A Machiya Facade, Kyoto — Photo: Basile Morin, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AFacade_of_a_dwelling_with_sudare%2C_wooden_balustrades_and_yellow_lamp%2C_Shinbashi-dori%2C_Gion%2C_Kyoto%2C_Japan.jpg

- Gion at Night — Photo: lumoplank, via Wikimedia Commons (CCo).
https://commons.wikimedia.org/wiki/File%3AStreets_of_Gion%2C_Kyoto_-_Gion7708.jpg
- Matsumoto Castle — Photo: Lightning toothed whale, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AMatsumoto_Castle_Keep_Tower.jpg
- Roof Tiles at Matsumoto Castle — Photo: DimiTalen, via Wikimedia Commons (CCo).
https://commons.wikimedia.org/wiki/File%3AInui_Kotenshu_roof_details_seen_from_the_Dai-Tenshu%2C_Matsumoto_Castle%2C_2016.jpg
- The Nakagin Capsule Tower, 2019 — Photo: Svetlov Artem, via Wikimedia Commons (CCo).
https://commons.wikimedia.org/wiki/File%3ATokyo_Nakagin_capsule_tower_2019-04-4.jpg
- The Garden at the Nezu Museum — Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3ANezu_Museum_Garten-20091020-RM-113550.jpg
- The Dry Garden at Ryoan-ji — Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0).
<https://commons.wikimedia.org/wiki/File%3ARyoan-ji-Garden-2018.jpg>
- A Gassho Farmhouse, Shirakawa-go — Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AShirakawa_Gassho-zukuri_14.jpg
- The Post-and-Beam Frame — Photo: lumoplank, via Wikimedia Commons (CCo).
https://commons.wikimedia.org/wiki/File%3ATakayama%2C_Part_II_-_Takayama6392.jpg
- The Garden as a Room — Photo: Bjørn Christian Tørrissen, via Wikimedia Commons (CC BY-SA 4.0).
<https://commons.wikimedia.org/wiki/File%3ARyoan-ji-Garden-2018.jpg>
- The Deep Eave and the Roof — Photo: Reggaeman, via Wikimedia Commons (Public domain).
https://commons.wikimedia.org/wiki/File%3AHimeji_Castle_The_Keep_Towers.jpg
- The Sliding Screen Wall — Photo: Benh LIEU SONG from Torcy, France, via Wikimedia Commons (CC BY-SA 2.0).
https://commons.wikimedia.org/wiki/File%3ATatami_Alcove_%2845063444665%29.jpg
- The Threshold Sequence — Photo: Ermell, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3ANezu_Museum_Garten-20091020-RM-113550.jpg
- Inside the Paper Church, Kobe — Photo: Bujdosó Attila, via Wikimedia Commons (CC BY-SA 2.5).
https://commons.wikimedia.org/wiki/File%3ATakatori_Catholic_Church.JPG
- A Tatami Room Opening to a Garden — Photo: lumoplank, via Wikimedia Commons (CCo).
https://commons.wikimedia.org/wiki/File%3ATakayama%2C_Part_II_-_Takayama6392.jpg
- A Tatami Room and Tokonoma — Photo: Benh LIEU SONG from Torcy, France, via Wikimedia Commons (CC BY-SA 2.0).
https://commons.wikimedia.org/wiki/File%3ATatami_Alcove_%2845063444665%29.jpg
- The Joan Tea House — Photo: Lombroso, via Wikimedia Commons (Public domain).
https://commons.wikimedia.org/wiki/File%3AUrakuen_Joan.jpg
- The Great Buddha Hall, Todai-ji — Photo: Cun Cun, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AT%C5%8Ddai-ji_Daibutsuden%2C_June_2019.jpg
- The Great Buddha, Todai-ji — Photo: Zairon, via Wikimedia Commons (CC BY 4.0).
https://commons.wikimedia.org/wiki/File%3ANara_Todai-ji_Daibutsuden_Interior_Daibutsu_04.jpg
- Tokyo Station, Marunouchi — Photo: Zairon, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AMarunouchi_%26_Tokyo_Station_1.jpg
- Tokyo Station Plaza — Photo: Basile Morin, via Wikimedia Commons (CC BY-SA 4.0).
https://commons.wikimedia.org/wiki/File%3AMarunouchi_Central_Plaza_with_blue_sky%2C_Tokyo_station_and_Shin-Marunouchi_Building%2C_panoramic_view_from_JP_Tower%2C_Tokyo%2C_Japan.jpg
- The First Gymnasium, Yoyogi — Photo: Rsl421, via Wikimedia Commons (CC BY-SA 3.0).
<https://commons.wikimedia.org/wiki/File:Yoyogi-National-First-Gymnasium-01.jpg>

· END OF BOOK XXIX ·

The Architectural History Series

World Arch Journal's Architectural History Series gives every style and building type of the journal's history atlas its own complete book: the full history, the materials honestly told, the key buildings in depth, and the field method that lets the reader identify the style in the street.

Each book is published first as a free web edition with a downloadable PDF on worldarchjournal.com.

Book I · Art Nouveau · Book II · Gothic · Book III · Castles · Book IV · Baroque & Rococo · Book V · Romanesque · Book VI · Modernism · Book VII · Victorian · Book VIII · Art Deco · Book IX · Brutalism · Book X · Frank Lloyd Wright · Book XI · The Dome · Book XII · Arch, Vault & Flying Buttress · Book XIII · Columns & the Classical Orders · Book XIV · Light in Historic Buildings · Book XV · The Historic House · Book XVI · Art Deco vs Art Nouveau · Book XVII · Gothic vs Romanesque · Book XVIII · How to Identify a Building's Style · Book XIX · Persian Architecture · Book XX · Ancient Rome · Book XXI · Ancient Egypt · Book XXII · Byzantine Architecture · Book XXIII · Ancient Greece · Book XXIV · Renaissance Architecture · Book XXV · Neoclassical Architecture · Book XXVI · Islamic Architecture · Book XXVII · Bauhaus · Book XXVIII · Mid-Century Modern Architecture — and this volume, Book XXIX · Japanese Architecture.

Read the whole series as it appears at <https://worldarchjournal.com/magazine/architectural-history-styles/>