

Ginza Street Survey, Kon Wajiro (1925)

Westernization versus Modernization

-Meiji Restoration (1868)

-Failure to differentiate between westernization and modernization

-Westernization becomes modernization

industrial bases, educational system, organization of governmental bureaucracy, fashion, metric system, and urban infrastructure

The political governing system also changed from the *shogunate* (warlord) to the imperial regime, which first gave Japan the sense of nation and its collective confrontation with the West and other foreign countries.

-*Wakonyosai* (Western knowledge in the Japanese mind)

This formula was set to soothe the instability caused by the total transformation of the social structure and the psychological anxiety it caused on the society and its individuals

Architecture

-Because of the confusion between westernization and modernization, western stylistic architecture was introduced to Japan under the banner of modern architecture

-the main stream of the then Japanese architecture led by other foreign architects such as Josiah Conder (1852-1920), their local disciples, and local architects who had studied in Britain, Germany, France, and America.

Josiah Conder (1852-1920)

-As a way of the *bummeikaika* (enlightenment) within the discipline of architecture, Japan brought in a number of foreign architects, who would function as the major route for the introduction of Western stylistic architectures. Josiah Conder was one of them

-Conder is often called “the father of Western architecture” in Japan, not only on account of his designs but also because of his role in establishing the Western method of architectural higher education in Japan

-Conder became appointed as the first professor to the Tokyo Imperial University (later to become Tokyo University) in 1887 and taught until 1910. During this period, he trained Japanese students with European stylistic architecture.

-In turn, the students were eagerly absorbing diverse styles of architecture in the spirit that "*European design was better but English design was the best.*"

Josiah Conder (1852-1920)

- His disciples such as Kingo Tatsuno(1854-1919) and Tokuma Katayama (1853-1917) were among the first generation in the western sense of the architect.
- Conder designed a number of buildings in Japan in the Victorian, Byzantine, Renaissance, Gothic revival, Colonial English, Queen Anne and eclectic styles.
- Conder also wrote articles and books about Japanese architecture, costume, gardening, flower arrangement and painting.
- His *Landscape Gardening in Japan* (London, 1893) played a critical role in introducing Japanese garden design to Western audiences

*Ueno Imperial Museum, Tokyo, 1882
(Hindu-Saracenic style)*

- Long, low two storey building (badly damaged in the Great Kanto Earthquake of 1923 and now replaced)
- Called Hindu-Saracenic style, (in reality orientalizing version of Venetian Gothic made popular in British India at about this time)

- Queen Anne style
- (this style was developed in reaction of the dogma of Gothic Revival and borrowed freely from the domestic architecture of the late 17th century and Queen Anne periods in England and the Netherlands.
- The style is characterized by asymmetrical plans, use of red brick and a combination of medieval and classical motifs.
- The Red House is considered to be part of this tradition
- Brick-and-stone Flemish gabling
- One of the hall marks of the developed Queen Anne fashion
- Continuous verandas that characterized so many buildings of the foreign settlements in Japanese ports

Iwasaki Villa, Tokyo, 1889

By Conder (Queen Anne Style)

- A three-storey structure built of brick w/iron reinforcing bands and making limited use of steel in spans
- The whole of the building was faced in stone, and steel-sash windows were made use of almost certainly for the first time in Japan
- Neo-classical inspiration
- The original building is square in plan (later extended) with courtyards
- The front courtyard is screened by a rusticated structure, one storey in height

Bank of Japan

Tokyo

By Kingo Tatsuno, 1890-96

*Kabuki Theatre,
Tokyo, 1924*

Isoya Yoshida

Kabuki Theatre

- Kabuki – a traditional theatrical genre in Japan, originated in the 17th century
- It was developed by merchants during Edo Era as a way to express their emotions

*Kabuki Theatre,
Tokyo, 1924*

Isoya Yoshida

- The traditional wooden post and lintel structure is imitated through concrete
- The traditional gate, post and lintel structure with brackets are again imitated through concrete
- This image address a question of how to create continuity of tradition with modern construction methods and materials (the issue of tradition)
- Tradition is understood at the level of formal features to be reproduced through modern materials & techniques
- A low level of interpretation on the relationship b/t tradition and the present

Re-evaluation of traditional Japanese architecture by two avant-garde architects from America and Europe

-Antonin Raymond (1888-1976)

-Bruno Taut (1880-1938)

"To me, who actually has been engaged in practice in Japan, it became apparent that many of the aspects of the so-called modern architecture, that is of creative and not imitative architecture, and one based on the needs and the demands of today, were extraordinarily similar to the aspects of traditional Japanese architecture, especially as regards the dwelling."

Antonin Raymond "The Spirit of Japanese Architecture" (early 1950s)

"the purity of unconcealed construction members"

"the modulation," "the big expanses of fenestration"

"the freedom and multi-use of the interior spaces," and "the movable partitions"

Simultaneously, the practice of dwelling

Antonin Raymond "The Spirit of Japanese Architecture" (early 1950s)

Antonin Raymond (1888-1976)

-An American architect of Czech birth (Bohemia, now Czech Republic)

-He graduated in 1910 from the Czech technical University, Prague, where he was particularly influenced by the work of Frank Lloyd Wright

-He then immigrated to the USA and worked in New York for Cass Gilbert

-He entered Wright's studio at Taliesin, WI in 1916 for a year

-He went with Wright to Japan in 1919 to work on the Imperial Hotel (1919-21, destroyed in 1968), Tokyo

(Wright's first visit to Japan was 1905)

-Deciding to stay in Japan, he opened his own architectural office in Tokyo in 1920

-Raymond's early works continued to be influenced by Wright

The imperial Hotel, Tokyo, 1919-21 (demolished in 1968), Frank Lloyd Wright

- It was a low building in a dense city, which spread out over its site in the form of five distinct, yet related structures
- A central wing provided hotel services: entry, reception and dining
- Guest rooms were in two outer wings separated from the service wing by courtyards

- Used elaborately carved local stone to accentuate the brick structure
- Greater emphasis on surface texture and colour

- Courtyards enclosed by the central wing and the side wings accommodated Japanese gardens

- Wright designed the interiors & furniture of the hotel, including the well-known hexagon-backed chairs & oak occasional tables

- The hotel was opened on September 1, 1923
- On the same day, about noon time, the great Kanto earthquake occurred. The building survived the earthquake b/c of its reinforced concrete raft foundation.
- This added a huge fame to Wright.
- Demolished in 1968

Antonin Raymond, *Tokyo Tennis Club*, 1921

- Shows Wright's influences (next slide)
- in the adoption of a fabric-like combination composed of wooden frame and stone masonry crowned w/a traditional slope roof covered w/tiles
- A fireplace was also introduced as the centralizing device of the club

Ward Willits House

Chicago

Frank Lloyd Wright

Antonin Raymond, *Interior, The Hoshi School 1922, Tokyo*

- Transformation of the structural logic of supporting & being supported into a composition to the degree that the structural logic is no longer legible, a treatment which Wright in this Unity Temple in Oak Park, Chicago (1906)

-1923, Kanto earthquake

- hired a structural engineer and became interested in reinforced-concrete structure
- and gradually moved towards the collaboration with local carpenters and adoption of local materials and dwelling traditions

House at Reinanzaka, Tokyo (1923)

- Concrete is the material suited for precision, lightness, and economy of space, out of which arises the elegance of simplicity.
- Concrete is also preferable in terms of resisting earthquakes because of its strength against compression, and is also fire-proof.
- Concrete columns realize continuous longitudinal windows by cantilevering the floor beyond the positions of the columns, the windows which Raymond considered the justifiable symbol of civilization of the modern era. Masonry walls are replaced by concrete columns to yield flexible open spaces (Le Corbusier's influence?).
- The concrete construction makes it possible to adopt flat roofs.

- This assessment of concrete means not only that Raymond found the structural strength of concrete in resisting natural disasters of Japan, but also that Raymond was ready to break with Wright's compositional combination of wood, panel, and stone masonry and opened himself vis-à-vis such progressive architecture as Auguste Perret's and Le Corbusier's.

- Constructed out of reinforced concrete, “monolithic, earthquake-proof structure” w/out any finish
- It was the building of bare concrete, which replaced the composition of wood, plaster, brick, and stone in Wright’s early architectural vocabulary for residential buildings
- But, to a degree, this work realized the underlying meaning of Wright’s voice: “Reveal the nature of the wood, plaster, or stone in your design; they are all friendly and beautiful.”
- Following not Wright’s formal vocabulary, but rather his spirit of revealing the nature of the material honestly

- adoption of concrete in a non-decorative composition & the functional planning of the inside
- this house shows the features of modern architecture for the first time.
- Simultaneously, the revelation of the structure, its crossing of beams and columns, becomes the only ornament of the modern residence

- This house was built on a small rectangular site
- It was a two-story L-shaped building flanked by a garage on one side
- According to Raymond, a garden was provided as the tool which unifies men and nature
- Being hinted at by the deep eave of Japanese residential spaces, Raymond invented overhangs molded out of concrete in order to prevent the invasion of the direct sunlight
- Raymond considered the movement of the car and that of the occupiers in the corner treatment of the garden and the entrance.
- He adopted short-radius circular forms for these, though in a little timid way compared to Le Corbusier's Villa Savoye

St. Luke's Hospital

Tokyo (1923-4)

Antonin Raymond

- The hospital itself was originally commissioned to Raymond
- Raymond believed that the hospital was the first rational modern hospital of the world
- The features were to be functional zoning, proper orientation for each zone and rooms, provision of the best equipment, and efficient circulation
- In terms of structure and engineering, Raymond simulated Auguste Perret's reinforced concrete architecture

St. Luke's Hospital

Tokyo (1923-4)

Antonin Raymond

- Raymond's influence from Perret (next slide) was partly a young Czech architect (Bedrich Feurstein) who joined Raymond's office around the time when the hospital was being designed.
- This architect was a pupil of Perret.

Notre Dame de Chapel at Le Raincy
(1922-23)

Near Paris, August Perret

Perspective Drawing by Hugh
Ferriss

- In particular, the church was a surprising imitation of August Perret's *Notre Dame de Chapel at Le Raincy*
- Raymond's scheme reveals the courageous spirit of a modern architect in a period when the revival of Gothic, Romanesque, and Byzantine churches were being distributed by foreign architects & missionaries in Japan
- The church was positioned at the center of the hospital
- It was planned in the way that the balconies would be connected to the second floor of the hospital for the bed-ridden believers

- Based on the plan & the perspective of the outside, the chapel must have been an enclosure formed out of bare columns, exposed walls, and ceilings, all of which were constructed out of reinforced concrete, and perforated brick filling
- Had it been realized, it would have made a true impression on the field of church architecture of Japan
- The board of the Episcopal Missions in America & the head of the hospital Dr. Rudolf B. Teusler rejected Raymond's proposal for the church as well as the hospital
- By that time, since most of the structure was already erected, they could change only the interior of the chapel, for which an American architect worked w/the image of the Gothic space

Chapel, Tokyo Women's Christian College

Tokyo (1935)

Antonin Raymond (in imitation of Perret's work)

- The Karuizawa House marks a unique moment in Raymond's progress towards the modern
- Karuizawa was famous for summer resort
- The purpose of this erection was "to see what could be done if we seized the opportunity to build a structure exactly suited to the life we wished to lead"
- The simple & bucolic life on a hillside in Karuizawa
 - In this project, his practice maintained a close contact w/the skills of the local carpenters, while teaching them new techniques of the West
 - An extremely interesting experiment in which he compounded a modern way of living w/local material bases of techniques & materials
 - Built by local carpenters & constructed out of materials available at & around the site such as lumber, lava concrete from a nearby volcano, cedar planks, & tin roofing "laid over w/a thatch of larch twigs'

Antonin Raymond, *Summer Residence, Karuizawa (1933)*

- The house included a juxtaposition of the two ways of living, the traditional Japanese & the West, w/in the same structure
- The main living area of the house is flanked by three Japanese style bedrooms, which are covered with *tatami* mats, & one Western style bedroom

Maison de M. Errazuris, unbuilt (1930)

Le Corbusier

- The main room of the plan was inspired by Le Corbusier's unbuilt project Maison de M. Errazuris in Chile (1930) (It also reveals a typological similarity to Le Corbusier's Le Petit Maison in Swiss b/c of the flexible long narrow living area)
- The interior of the Maison de M. Errazuris indicates an ensemble of concrete footings, local stones covering the floor and the ramp, and the post and lintel structure using wood.
- Upon this ensemble added an inclined roof built out of a wooden lattice structure covered w/local tiles.

- It implies a well-ordered and standardized process of construction
- a sequential combination of each independent stage of the masonry work, the erection of bearing walls of the sides, and setting up of columns, the lacing of wooden beams, and the finishing work of comprising “windows, doors, partitions, and built-in closets,” and the final “in-fillings such as glass, plywood or asbestos-cement.”
- But this way of construction in the 1930s was not so much different from that of a primitive hut of the region.
- Anyway, what was LE Corbusier’s response to this copy by Raymond?

- When this work was published, Le Corbusier responded on May 7th, 1935 to this imitation by sending a letter.
- He complimented that the Karusizawa House made so successful an interpretation of his villa in Chile that it brought the quality of the spiritual into the residential space

Bruno Taut (1880-1938)

- came to Japan to escape from the Nazi
- Escaping from the National Socialist regime, Taut left Germany in 1933 for Japan, via Switzerland. This visit to Japan was through the invitation of the Japanese Society of Architects. He stayed in Japan for three years
- in Japan, Taut was employed by the Crafts Research Institute at Sendai, but in the absence of architectural commissions except a few small design works he wrote on Japanese art and culture
- From Japan he went to Turkey as Japan became an ally of Germany, and died in turkey. This was simultaneously partly due to his asthma against which the humid climate of Japanese summer worked

Fundamentals of Japanese Architecture (1936, English edition 1939)

- concentrated on his understanding of the contrast between *Tenno* (Emperor) and *Shogun* (Warlord) architecture, particularly between *Katsura* and *Ise* on the one side and *Nikko* on the other

- Based on a 1935 lecture he delivered to the public sponsored by the Kokusai Bunka Shinkokai – The Society for International Cultural Relations
- Concentrated on his understanding of the contrast b/t
- Tenno* (Emperor) architecture versus *Shogun* (Warlord) architecture
- *Nikko versus Katsura* and *Ise*
- He differentiates two trends of Japanese traditional culture; the rational and the irrational
- The artistic & architectural works guided by the irrational trend have been, in Taut's view, introduced & propagandized in Europe and America by some foreign travelers & scholars (such as Justus Brinkmann's *Kunst und Handwerk in Japan*, published in 1889, and Edward Morse's *Japanese Homes and Their Surroundings*, published in 1886)

- The Buddhist temple at Nikko is the culmination of the decorative trend.
- The rational trend, however, is also a dominant character of Japanese architecture
- The Ise Shrine, and the Katsura Detached Palace, which has been disregarded by the aforementioned foreign travelers & scholars, is in fact the essence of Japanese architecture for Taut
- One of Taut's achievements was to position the Katsura Palace as one of the most prestigious cultural heritages of Japan
- Before him, the palace had been disregarded by foreign scholars captured by mysticism and exoticism

Buddhist Temple in Nikko

House in Shirakawa, Japan

Ise Shrine

- In this palace, the simplicity achieved by rational structure is evident
- The Katsura Palace is based on the traditional Japanese construction system practiced by the common people, the fact emphasized by Taut in order to defuse the class connotation of the palace
- The system is based on the measurement unit *shaku*, which is about 11.9 inches.
- Six *shakus* makes one *ken*.
- One *ken* corresponds to the distance b/t the center lines of two adjacent columns.
- This unit *ken* becomes the measure in defining the whole scale of a house

- Columns are laid on stone pebbles, and these stones are set in bed-rocks about two feet deep and upon the columns is wooden lattice structure
- Then in-filled are exterior panels made out of laths of bamboo strips tied together by the rice fiber.
- The panels are finished w/mud & plaster.

Amado: a wooden exterior panel that protects the shoji

Shoji: an interior panel made out of light strip of wood covered with translucent rice paper

Fusuma: interior sliding panels covered with paper decorated with a paulownia flower and leaf motif

Nageshi: a horizontal member preventing the deflection of the wooden cage structure above fusuma

Tatami: straw mat. It operates as the module for measuring the size of the room

Moon terrace

- For Taut, this rational construction frames the natural scenery by framing the view and by receding to the background.
- The Moon Terrace of the Katsura Palace exists because of the inconspicuous nature of the building (?).

Houses and People of Japan (1937)

-research into the everyday of Japanese life

-the architecture not of nobility, but of common people

-saw parallel bt. Japanese residential architecture by common people and some European residential architecture