



Department of Construction
NZI Diploma of Architectural Technology

DESIGNIN THE BUILT ENVIRONMENT– 15 Credits

– Modernism 1920's-1950's (Internationally)

the Modern Movement – in Europe and USA and a selection of key players

- Mies van der Rohe in the USA
- Le Corbusier
- Alvar Aalto

References for the enclosed material come from the following sources:

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3. The Guinness Encyclopaedia. Guinness Publishing. 1990. UK
4. A Concise History of Western Architecture by R. Furneaux Jordan. Thames Hudson Publishing. UK
5. The Chicago School of Architecture (1875- 1925) by Carl W Condit. University of Chicago Press. 1964. USA
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7. History of Architecture – 2nd edition. Spiro Kostof. 1995. Oxford University Press. UK

The 1920's was a boom era for building and the arts worldwide and therefore lifestyle extravagances were evident too...(known as the roaring 20's!!).But it only lasted for about 10 years.

The 1930's saw 'The Depression' hit worldwide for about 5 years..with high unemployment, little or no housing was being built by the masses as materials and money were scarce. However the elite / rich were still building and employing highly competent craft builders who were never out of work.

In New York a few skyscrapers were still being built to meet the reduced demand for commercial space, following the collapse of Wall Street (the stock exchange) in October 1929 and they were designed mainly in the Art Deco style. This period /style was also known as the Spanish Style or Mediterranean or Moderne.

The Chrysler Building New York, ,the RCA Victor Building and the Hoover Building are classic art deco examples, built around 1931-32. The Empire State Building New York, was also built in the 1930's and was the tallest building in the world till the last decade or so.

Frank Lloyd Wright (1867-1959) His later work

Frank Lloyd Wright's work went through a series of iterations, linked primarily to his driving philosophy to design simply and push technology and design to the limit on every project. He was also faced with a series of personal tragedies, which in turn affected his work and earnings.

Each time though he came back stronger than ever and always with a brand new way of designing buildings and using technology.

The Modern Movement was heavily influenced by Wright. Wright was looked to by the rest of the architectural world for direction until around 1908. Books of his work were published in Germany in 1910 and 1911, and these had an immediate effect on developments in Europe.

A selection of important works from late 1920's to 1950's:

Storer House. California. 1920's

Imperial Hotel. Japan. 1914

Taliesin 1 Spring Green. 1925
House on the Falling Water .Pennsylvania.1936
Johnson Wax Building. Racine.Wisconsin.1936-44 .
Guggenheim Museum .New York.1959

Le Corbusier (1887 – 1965)

Le Corbusier (a pseudonym of Charles- Edouard Jeanneret), was a dominant figure in modern architecture from 1920 – 1960.

His early training included trips to Greece and Italy, and an apprenticeship with Auguste Perret in Paris from 1908 -1909. Perret was one of the pioneers of reinforced concrete construction. Corbusier was also apprenticed to Peter Behrens in Berlin from 1910-1911.

He never left Europe before or during the war years as did van der Rohe and Gropius et al.

In 1920 he published a series of essays, later included in a book called 'Vers une architecture'. In these essays he put forward his idea that architecture should be 'machine-like', being functionally efficient, and its capacity for serial production. This idea was convincingly demonstrated in some of his early works, for example the two houses he designed for the Wiesenhoff Housing Exhibition in Stuttgart, in 1927. They were prototypical solutions.

Le Corbusier's later works were quite different, being individual specific and unique works. However, he always organized and manipulated form for maximum effect, in accordance with his famous definition of architecture as:

" the masterly, correct and magnificent play of masses brought together in light"

Central to his philosophy were the 'Five points of Architecture':

- Free plan
- Free façade
- Pilotis (stilts)
- Terrace at roof level
- Ribbon windows

Seen very clearly in his Villa Savoye design

Examples of his work are:

Maison Dom-ino- a prototype for serial production. 1914-1915
Vers une Architecture. 1923
Weissenhoff Housing Expo houses.1927
Villa Savoye at Poissy. 1929/31

Unite d'Habitation. Marseilles 1952

Ronchamp Chapel. Near Belfort. SE France. 1953

Palace of Justice . Chandigarh. 1956

Museum of Modern Western Art. Tokyo. 1959

Dominican Monastery of Sainte-Marie de la Tourette. Near Lyons. 1959

Other buildings of note from this period include:

IIT (Illinois Institute of Technology) Chicago. by Mies van der Rohe 1949

Schroder House..Utrecht .Netherlands. by Gerrit Rietveld 1924/25

Paimio Sanitorium. Finland. by Alvar Aalto.1929/33

Rockefeller Centre .New York by Raymond Hood. 1932/40

Seagram Building. New York. by Mies van der Rohe. 1954

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DESIGN IN THE Built ENVIRONMENT– 15 Credits

– Modernism - New Zealand 1920's to 1949

The 1920's in NZ was a time of public educational or recreational buildings either privately or publicly funded, following the end of World War 1. The enthusiasm was shortlived in terms of business confidence.

The Depression of the late 20's early 30's, and Art Deco were also evidenced in NZ and the latter in Napier in particular, following the 1931 earthquake that basically destroyed over 60% of the city and killed 260 people.

Out of work, newly graduated architects were employed to redesign the city..and the style of the time was ..art deco..

There are many Spanish Mission examples in and around Auckland (Pt Chevalier, Mt Albert, Ponsonby et al), Wellington and Napier / Hastings..recognisable by the parapet at the front hiding the roof pitch and the use of modular windows, plaster render (or weatherboard) and curved bay windows in plan.

Ref also to 'History of NZ Architecture from Polynesian beginnings, Peter Shaw..and the Elegant Shed by David Mitchell.

State Houses, that were first designed, built and offered for sale in 1919, were again built and offered for sale/rent to buy from 1936 onwards. This time they were more popular as they were well built structures and were affordable either as rentable properties or as properties to purchase, given the low interest rates offered by the government.

World War 2 hit in 1939 and lasting until 1945, in turn reducing almost to zero the building programmes for residential or commercial buildings worldwide. The buildings that were built were largely homes for the wealthy and were built by the top craftsmen of the time, working in wood and stone, and following the early English cottage style in the main. Examples in Auckland for example, can be found in Parnell, Orakei, Kohimarama, St Heliers, Greenlane, Epsom et al.

NZ Architectural Examples from 1930's –1940's (all feature on the video / and in the book 'The Elegant Shed '

- 1920-22 Auckland University Arts Building on Princes St, by Lippincott
- 1926-29 The Civic Theatre. Queen and Wellesley Sts.
- 1929 The Auckland War Memorial Museum. In the Auckland Domain.

- 1936/7 First (Labour Govt's) State House opened in Miramar Wellington (though first ones were built as workers dwellings as early as 1919).
- 1937 - State Houses built throughout NZ
- 1930's Art Deco and Spanish Mission houses and commercial buildings – Auckland, Wellington, Napier
- (large) Private residences – now converted to hospitals or nursing homes for example in the South Island and around Auckland and Wellington.
- Vernon Brown's 'Hoffman House' Remuera 1949