

MAIN PTS OF FW & ROBIE HOUSE

- BACKGROUND -

- Established Chicago Arts & Crafts with Sullivan
- But, felt, machine could be utilized in good design
- Sought horizontality as opposed to Verticality of Arts & Crafts
- Moved away from functionalism of Arts & Crafts.

- ROBIE HOUSE -

- Connected w/ landscape Prairie: HORIZONTALITY
 - LOW SLUNG ROOF - LARGE EAVES - CHIMNEY
 - REJECT EURO CLASSICISM - ^{NOT APPROPRIATE FOR NEW USA} LOOK TO MAYAN & JAPANESE
 - EMPHASIS ON SPACE & PLAN RATHER THAN FORM \leftarrow MAJOR INFLUENCE
 - OPEN PLAN REJECTING WESTERN CELLULAR ROOMS
 - INTERLOCKING SPACES
 - FAMILY/DOMESTIC CEREMONIAL CENTRE TOKONAMA: FIREPLACE
 - OUTDOOR/INDOOR INTERLOCKING
 - CANTILEVERED JUTTING ROOF CONNECTS
 - HORIZONTALITY EXPRESSED IN SCRATCHED MORTAR.
- ## - INFLUENCE -
- Horizontality - California Bungalow 1920's.
 - AUTHENTIC AMERICAN ARCHITECTURE

ARTS & CRAFTS

ART NOUVEAU MAJOR POINTS

KEY PRINCIPLES

- Concern over degradation of artistic quality by industrial revolution
- How to preserve historical values of art under conditions of industrial capitalism
- Rejection of classicism
- VERNACULAR, BRITISH VILLAGE ARCHITECTURE REVERRED
- ADMIRATION OF CRAFT PRODUCTION
- MACHINE SHOULD BE REJECTED
- FUNCTIONAL DESIGN
- TURNED TO NATURE FOR INSPIRATION: NUANCE
- NATURAL MATERIALS FAVOURED
TIMBER UNTREATED & RED BRICK
- TRUTH → MATERIALS SHOULD APPEAR AS THEY ARE
HONEST EXPRESSION?

ART NOUVEAU

- INSPIRED BY & RUNNING A PARALLEL TO ART & CRAFTS
- ALSO SOUGHT A NEW FORM, REJECTED CLASSICISM
- ALSO SOUGHT TO UTILIZE MECHANIZATION IN TASTEFUL WAY
- RATHER THAN MERE IMITATION OF NATURAL ORNAMENT—
ART NOUVEAU ORNAMENT & OBJECT MERGED & FUSED AS AN ORGANIC, VEGETAL EXPRESSION

EBENEZER HOWARD: GARDEN CITY

RESPONSE TO URBANIZATION OF INDUSTRIAL REV.

CONTEXT & PROBLEMS

- Development of industry/capitalism = URBAN CITY
- CAUSES OVERPOPULATION & DRAMATIC IMPLICATIONS FOR LIVING CONDITIONS
- PRE-EXISTING ^{LARGE} CITIES i.e. LONDON, BARCELON, PARIS SUFFER FROM OVER POPULATION & UNDERDEVELOPED INFRASTRUCTURE
 - CHOLERA OUTBREAKS

HOWARD'S RESPONSE

- CONCEPTION OF GARDEN CITY
- IN COUNTRY SIDE - ABANDON ^{OLD} URBAN CITIES
- SELF SUFFICIENT SMALLER CITIES

DESIGN IDEAS

- CONCENTRIC ^{STREETS} PLAN
- LIMITED LAND & POPULATION = 32,000
- SYSTEM OF SATELLITE CITIES CONNECTED BY RAIL
- RAIL FOR GOODS NOT HUMANS
- PARK AT CENTRE
- CITY DIVIDED INTO APPROPRIATE SECTORS
- RURAL GREEN BELT SURROUNDS: RESTRICTS UNREGULATED GROWTH

IMPLEMENTATION

- URMW - LETCHWORTH - NTH OF LONDON
- INNERCITY GARDEN SUBURB - HAMPSHIRE GARDEN SUBURB, ORKNEY GARDEN SUBURB.
- CONTRADICTION - NO ABANDONMENT OF OLD URBAN CITY.

REGIONALISM MAJOR POINTS

KEY ISSUES FOR REGIONALISTS

- DIFFUSION OF MODERN MOVEMENT
- CONCERNS WITH FAILINGS OF MODERN MOVEMENT TO MEET LOCAL EXPECTATIONS
 - SOCIALLY, CULTURALLY, ECONOMICALLY
- LE CORBUSIER FAILINGS IN CHANDRIKAM, INDIA,
- WESTERN METHODS NOT APPL. 4 DEVELOPING ECONOMY
- MECHANISM FOR DIST. OF CAPITALISM

THEORIES PROPOSED

- QUESTIONS: ROLE OF 'TRADITION' IN GLOBALIZED AND MODERN WORLDS
- ALVARO ALTO, TRANSPARENT GROUP, EUROPE ARCHITECTS, AUSTRALIANS ETC
- ROOTED IN MODERNISM: PROTOTYPE
 - BUT: MORE SENSITIVE TO LOCAL CLIMATE, CULTURE & ECONOMICS.

EXAMPLE OF REGIONALISM

- **BALKRISHNA DOSHI** - SCHOOL OF ARCHITECTURE, AHMEDABAD, INDIA, 1968
- MODERNIST INFLUENCE OF LE CORB & KAHN
- BUT: SEARCHES FOR AN INDIGENOUS ARCHITECTURE
 - BUDDHIST, ISLAMIC, HINDU DESIGN —
- SYNTHESIS OF EAST/WEST INFLUENCES
 - INTERRELATION OF INDOOR/OUTDOOR SPACE
 - APPROPRIATE & 'HONEST' USE OF MATERIALS
 - PROPER CLIMATE RESPONSE
 - OBSERVANCE OF HIERARCHICAL ORDER ← (DEFINE)

BALKRISHNA DOSHI -

LOUIS KAHN - TRENTON BATH HOUSE

KEY DESIGN PRINCIPLES

- LIKE MIES EXPRESSED RATIONAL DESIGN
- EMPHASIS ON PLAN, BINARY (TARTAN) GRID
- ESTABLISHED A FIXED HIERARCHY OF SPACES "SERVICE & SERVED"
- REPEATABLE FORMS OF THE PLAN → NO FUNCTIONAL SPECIFICS
- NEED IN 1960S OF LONGEVITY IN BUILDINGS + MULTI-FUNCTIONAL
- ~~RE~~ SERVANT SPACES:
 - RECONCEIVED TO BE A NETWORK OF LINKED SPACES ACCOMODATING THE SERVICES WITHIN THE BUILDING TO BE REPLACED + UPDATED OVER THE LIFESPAN OF THE BUILDING

MAIN CONTRIBUTION

- STRUCTURE VISIBLE IN PLAN NOT EXPRESSED IN EXTERIOR
 - UNLIKE MIES, FORM NOT STRUCTURE WAS GOAL
 - REVALIDATION OF CLASSICAL IDEA OF FORM
 - SECONDARY ELEMENTS (FLOORS, WALL, CEILING) DOMINATING
 - ABSOLUTELY NEW, WHILST AT THE SAME TIME REAFFIRMING TIMELESS ARCHITECTURAL TRUTHS
- ↓
COLONNAD

GARDEN CITY (3)

- Barcelona → city surgery → expanding outwards,

Howard sought to deal with ^{the} problem by abandoning the old cities altogether

Abandon the unhealthy city.

- Three magnets analogy: people ~~are drawn~~
are drawn to

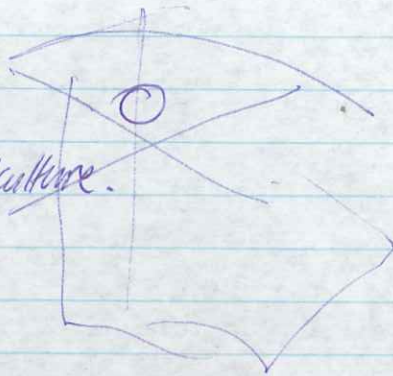
town a country but where both are subject to poor environmental conditions.

- His solution - combine best qualities of Town & Country, in what he called 'Garden City.'

- Cities of a new kind, for the industrial age, set in the countryside.

- Land area 1000 acres
+ 5000 acres for agriculture.

- Network, a system of 'garden cities.'



An autonomous community: Howard provides ~~into~~ a detailed prescription concerning how the city is to be founded and governed.

- Purchase of land
- Financial Feasibility
- Revenue
- Governance
- provision of schools and education
- industrial development
- farming
- creation of jobs.

Unwin & Parker interpreted Howard's diagram for the Garden City in Letchworth, North of London.

economically self-sufficient mutual aid
community, producing little beyond its
own needs.

- eliminate the journey to work
- railway reserved for objects rather than humans.

EBENEZER HOWARD

①

Response to Industrial Revolution

CONTEXT

- Finite city developed over 500 years totally transformed in 19th C
- key drivers to the change were the industrial revolution.
- a shift from animate and natural energy sources to coal & steam
- the emergence of mass production of materials such as cast iron, the invention of the steam engine and application to the development of rail networks, all contributed toward social, economic & political changes that impacted on the nature of cities in Europe.
- 19th C also triggered the beginning of Urbanization.

PROBLEMS

- Consequential demand for production & expanding city populations, led to cities that had pre-industrial origins becoming congested,
- A breeding ground for infectious diseases
- deteriorating environmental conditions.
- 19th C London an example of Paris.
- Britain: public health acts to regulate urban development & require local authorities to be responsible for the provision of sewerage, refuse collections, water supply, roads, inspection of slaughter houses, & burial of the dead.
- City of Paris suffered 2 outbreaks of cholera in early 19th C, and it soon became apparent that existing street systems were no longer adequate for the administrative centre of an expanding capitalist economy.

Protagonists of Garden City Movement argued that their approach was a solution to the perceived problems of industrialisation of the older cities.

THE GARDEN CITY & SUBURB

- Ebenezer Howard, toward end of 19th C,
- Argues that 19th C city was irredeemable, only solution:
 - build new cities in virgin countryside.
 - abandon eventually, degraded existing cities altogether.

Book in 1898: Tomorrow: a Peaceful Path to Reform.

SOLUTION: GARDEN CITY

- garden city conceived as being economically self-sufficient community, creating its own employment.

DIAGRAM: SET OF CONCENTRIC STREETS FOCUSED ON A PARK IN THE CENTRE.

- DIFFERENT STREETS & AREAS DESIGNED FOR RESIDENTIAL, COMMERCIAL, AND ADMINISTRATIVE USES.
- AROUND OUTERMOST RING WERE INDUSTRIES SERVED BY A RAILWAY LINE CONNECTED TO OTHER GARDEN CITIES
- IN REACTION TO PERCEIVED OVERPOPULATION OF INDUSTRIAL CITIES: GARDEN CITIES LIMITED TO 32,000
- ENTIRE CITY SURROUNDED BY A GREEN BELT (ACCOMMODATING AGRICULTURE) THAT WOULD PREVENT UNREGULATED GROWTH & URBAN SPRAWL.

IMPLEMENTATION

Howards ideas first implemented realised in 1st Garden City - Letchworth - North of London.

- only 2 were built at that time, because of overwhelming persistence of large industrialising cities, bolstered by continual improvements to physical and health conditions.
- Ideas were applied however to garden suburbs: ie 1909 Hampstead Garden Suburb of London. This however goes against Howards's cornerstone principle that these cities should be abandoned for the new Garden cities he proposed.

ARTS + CRAFTS ①

Key Themes:

- 1) Rearticulating the perceived problem with industrial methods applied to architecture.
- 2) John Ruskin - design methods involving 'styles', using nature and craft production to inform design.
- 3) Advocacy of functional design methods as opposed to rational methods.

- Renaissance architecture was perceived to be formulaic.
reproducing decorative motifs based on Greek and Roman architecture

- Predilection for Gothic.

- Ruskin dismissed the 'Crystal Palace' as irrelevant to the advancement of architecture.

- industrial production techniques were also rejected because it denied what was seen as the essential direct relationship between the crafts person and the artefact being made. Only this relationship could produce quality outcomes.

- Industrial processes broke the intimate link between design & craftmaking.

- Architecture style appeared to be reduced to little more than the application of ornament, a process made easy by industrial manufacturing methods.

Violet-le-Duc 2 necessary ways of being true

must be true according to methods of the programme and to methods of construction.

to be true according methods of programme is to fulfill exactly and simply the conditions imposed by need

- to be true according to the methods of construction, is to employ the materials according to their qualities and properties... purely artistic questions of symmetry and apparent form are only secondary conditions in the presence of our dominant principles.

- An 'alliance of form and need' and 'means of construction'

- for him 'truth' required that 'stone should appear as stone, iron as iron, wood as wood.'

JAM MORRIS

- Source of art & design should be derived from nature & not artistic conventions of Renaissance origin.

Also argued: Machine had no place in artistic production and revered the Middle Ages not for stylistic reasons but for the quality of their design and architecture determined by craft based work.

- Rejected machine production and industrialization, as a path to the future. His designs were based on natural forms ~~forms~~ furniture was crafted from natural materials finished to reveal its natural state.

FUNCTIONAL DESIGN

- Embedded in the idea was the observation that in nature forms varied, and that variation related to subtle differences and conditions. It was this notion of functionalism that was to be applied to in the design.

- Form in this sense, follows function

- Unique functional requirements will produce unique form. When applied to architecture this concept implied that since the requirements of every house may be different by degrees, the architectural form of every house

③ ARTS & CRAFTS

would also be different.

- Creating new forms from an understanding of functions, and expressing materials in their natural or 'true' state.

Red House - Webb 1859.

- craft production
- Use of natural material without embellishment
- Honest expression
- complete absence of any classical references or motifs in the house.
- Nature as a source of design
- Vernacular or traditional architecture as a source of design (British villages)
- Value tradition
- Country values as opposed to emerging industrial city as a model to be emulated.

- Arts and Crafts architects sought form in the functional ~~and~~ programme of their buildings.

- Although expression was also derived from the use of traditional building materials and vernacular building references.

- concerns with the degradation of quality that the industrial revolution brought about.

- 'hand of the crafts person' needed to be imprinted on the object.

- believed it to be a mistake to be overly nostalgic.

- Nollan House in Parnell, NZ, 1907 → Red Brick.

Celtic → the way it was made, craft production.

rejected academic references as being class determined.

- nature as reference in design rather than classical design.

• Design as an expression of natural form and structure
example of Morris Designs ~~and~~

Functional Planning: Red House

Rooms of different sizes
defined function for each room
functional relationship between rooms
Asymmetrical layout,
Openings were required for functional reasons.

~~Philip~~ Red House

'Functional Expression'

Villa - form derived from 'expressing' different functions

- Embellished from the 'humble' expression of natural materials.

- Asymmetrical arrangement.

'Rational' Planning: Villa Capra

Sets of rooms of similar sizes
No functional relationships between rooms.
No defined functions for rooms
Symmetrical layout.
Openings in geometric arrangement.

Villa Capra

RATIONAL EXPRESSION

- Form derived from geometry

- Embellished using Classical Greek.

- symmetrical arrangement

CR REGIONALISM



- find
- finding local relevance in modern architecture around the world.
- transforming the modern
- Regional bodies of work.
- search for local inspiration.
- Conflicting issues that arose around the concept of a universal modern architecture in its diffusion around the world to places such as Brazil, NZ, & India.
- that it denied the values of local cultures, contexts and climates.
- 'Critical Regionalism' emerging 1970's systematically sought to find local relevance.
- not intended to denote the vernacular, once spontaneously produced by the combinations of climate, culture, myth and craft. But to rather, identify those recent regional schools whose primary aim has been to reflect & serve the limited constituencies in which they are grounded.
- there are bodies of work in which distinctiveness can be detected that arises from local interactions.
- AUSTRALIA - Allen Newcott
- Modern architecture being adapted to suit local conditions.
- also turned to traditional Australian architecture:
 - both Aboriginal & M-C outback pioneer work.
- Responded to Aust. landscape by visually disconnecting his architecture from it (as with Mies' Farnsworth house)
- Carefully designing with the climate in mind. in terms of sun & wind movement.

South Africa

Transvaal group of Johannesburg. - began to question the 'in-vacuo abstraction' of Le Corbusier's abstract urbanism.

- by 1940's curious searches for 'South Africa' Architecture
- sought to reflect ^{or} countries own Renaissance heritage & the rich indigenous architecture of Sth Africa.

Looking For the Local

New Brutalists whilst rooted to modern movement, did raise questions about the validity of a universal architecture and the International Style.

- Problems arose with Le Corbusier's new cap city Chandigarh; India because Eurocentric theories of modernism were not able to accommodate the local culture, customs, and the reality of a developing economy.
- Seeking Architecture that is more responsive to human needs thus was one significant aspect of regional architecture.
- A functionalism much larger than the merely technical one.
- ones that will provide for the human being the most harmonious life.
- Architects such as Alvaro Siza sought to be more sympathetic to local cultural, physical and social contexts.
- His architecture, whilst remaining rooted in modernist practices, produced a richer body of work than the universal Intl style had produced when exported.

Regionalism

(3)

around the world in the 1930's & 40's

● Searching for Regional Significance

- Much of this work retained links to Modern movement through:
 - An interest in type, archetype & prototype
 - The pattern that connects.

- Building construction is regarded as the contextualizing of cultural elements.

NZ examples

'The Elegant Shed' 1984 - book by David Mitchell & Gillian Triggs

- conscious attempt to articulate a NZ architecture.

- local sources of inspiration from farm sheds, beaches and the 'can do' attitude of rural NZ.

● VERNON BROWN

Whilst reflecting the rational planning method and the right-angled geometric forms, Brown built in timber (not concrete) and instead of the white 'machine' aesthetic of the European counterparts, the timber was blackened from creosote treatment.

in 1950 - ^{the} Group Architects formed, led by Bill Wilson.

- to advance what distinguished NZ residential construction - Use of Timber.

- built timber-crafted houses that were like hand-made models of houses that might have been built with machine standardisation.

● MALLITE HOUSE (1954) BILL WILSON

- epitomised this.

- Open plan living spaces, (as in Mies's Farnsworth House)

- Built from timber, rafters are exposed and Plywood in a natural state

is used extensively, thus 'exposing' both the construction and materiality of the architecture.

- Responding to the context of site & climate is also significant to the work of the 1970's

CHAPPEL HOUSE (1969) by Michael Austin.

- has a plan designed to take advantage of the seafront view, a large Pohutukawa tree, the movement of the sun, and maintaining privacy from a public walkway.

- Perhaps more significant response to the regional values of NZ relates to Maori influenced architecture. Maori architect John Scott uses the traditional gable ended whereas a pt of reference for his gable-ended houses.

REWI THOMPSON - has sought to capture Maori culture metaphorically, such as his project for Ngati Poraka Marae representing a beached waka (canoe) carrying within its hull the Maori culture.

Alvar Alto - represents one of several important architects engaged with Modernism whilst remaining sensitive to a perceived need to express the significance of local values and cultures.

- Alto moves the discourse of modern architecture beyond the reproduction of universal principles toward an architecture that is more reflective of local culture and values.

- Finding local relevance in Modern Architecture around the world.

- What role does 'Tradition' have in globalised world?
" " " " " in the universality of 'Modern Architecture'?

- A concern about the apparent failings of modern architecture to meet local expectations & needs - socially, culturally & economically.

- Universal arch. language & loss of local identity.

Patterson
House
Hawkes Bay
1965

⑤ Regionalism

Neo-Marxism: modernization as mechanism for distributing capitalism, which result in exploitative dependent relations.

3 responses to regional arch. in a contemporary context: all intended to be responsive to local culture and contexts.

- 1) Reproduce trad. architecture
- 2) Reinterpreting trad. arch. in a contemporary context.
- 3) "Critical Regionalism" - an arch. which could neither be branded as internationalism nor as imitating arch. of a region. - application of design principles that have regional value and significance.

Pacific Fall VoA ~~1998~~ 2008.

Louis Kahn - India Institute of Management, Ahmedabad.
1968. India. Ahmedabad.

Balkrishna Doshi

- Modernist influences: Le Corbusier & Kahn. search for indigenous Indian Arch. (Buddhist, Hindu & Islamic).

Synthesis of Western & Indian influences.

- * Interrelationship of indoor / external space.
- * Appropriate & honest use of materials.
- Proper climatic response.
- Observance of hierarchy order

School of Architecture, Ahmedabad, India, 1968

RATIONALISM vs FUNCTIONALISM

①

One of the main conflicts within the German avant-garde of 1920s was between 'Functionalists' & 'Rationalists'.

- **FUNCTIONALISTS** = created Unique, non repeatable buildings.
forms shaped 'round their functions,

- **RATIONALISTS**: Looked for typical, repeatable forms,
- able to fulfill generalised needs.

- ART NOUVEAU - FUNCTIONALIST ROOTS OF ARTS AND CRAFTS.

- Conceptualized design as a process of creating 'unique forms' from a functional understanding.

- Since functions varied, so should forms.

LE CORBUSIER in 'Towards a New Architecture' had already laid the groundwork for a rationalist agenda perceived as being necessary to capitalise on industrial production.

- Machines, & industrial production processes demanded standardisation and generalist requirements, as opposed to the production of unique one-off designs.

BAUHAUS

- Wehrbund cont. to thrive in WWI - its promotion of designs for industrial production.

- linking of Arts & Crafts to industrial production developed a socialist agenda, removing elitism of art, & eliminating inferior position of 'craft'.

Walter Gropius appointed head of Bauhaus in 1919.

- supported rationalist approach, which went on to define the philosophical approach of the school.

- Recognised the Rationalist's position that the future depended on industrial manufacturing processes.

- By applying rational principles, the architecture produced would be new, unique, and able to address the imperatives of the global industrial cultures.
- Rational design is the key method that underpins the articulation of a modern architecture theory set out by Le Corbusier.

ROBERT VENTURI

- Perceive

Rejecting Modernism

- Perceived redundancy of the modern movement; loss of complexity in architecture

- Validating the ordinary

- 'Pop' cultures: Pop architecture

Questions about modernism

- In art practices: Shift from abstraction & abstract thinking to representing the world in a 'realistic' way.

~~But~~ 'like elements - hybrid rather than pure'

'more is not less' - ref. to challenge to Mies 'less is more'
"less is a bore"

- for Venturi architecture should be complex, and embody contradictions.

SOLUTIONS

Design by being 'conscious of the past - by precedent thoughtfully considered.'

- complexity, ambiguity, contradiction, dbl-functioning,
'Both-And' Architecture.

LEARNING FROM LA

- Revalidating study of history as a legitimate endeavour.

- Good architecture creates symbolic meaning for users able to 'read' architectural meaning into form, space and surface.

- Embellishment and ornament can therefore be argued to be essential to create an architecture that is meaningful in the public realm.

- Modernism on the other hand, stripped away symbolic meaning.

LEARNING FROM LAS VEGAS (1977) DENISE SCOTT-BROWN, VENTURI, IZENOUR,

- An attempt to understand iconography of the popular urban environment.
- Modern architecture failing: Did not reflect values & needs of general public, alienating society.
- A Better understanding of how 'Popular' buildings emerged would lead to an architecture better appreciated and understood by the public at large.

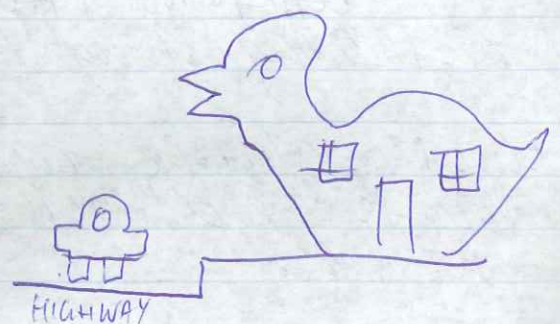
Categorised 'Popular' architecture into 2 archetypes:

- DUCKS: Buildings where the meaning is integral with their form
- DECORATED SHEDS: Meaning is separated from architecture by way of a billboard/signage fixed to the front facade of a building.

"Reading" for information and meaning in architecture.

'Popular' meanings.

Architect Vs Popular opinion



DECORATED SHED
(BIG SIGN LITTLE SHED)

DUCK
(BUILDING IS SIGN)

①

Le Corbusier

- Significant was his resolution of the previous perceived conflict between industrialization and quality architecture.
- Architecture was to be fully industrialized using modern materials and methods. Design quality to be insured by the systematic application of rational design principles.
- Resolution in building technique, through characteristic effects of interlocking spaces, parenting volumes and interpenetrating planes relied on the machine age materials of concrete, steel and glass.
- Le Corbusier describes architects of the time as being in an unhappy state of retrogression.

Reminders to Architects:

Key elements to architectural form are:

- Mass (needs to be clearly articulated)
- Surface: mass is enveloped by surface, better understood by engineers who design surfaces to reflect needs. (rather than arbitrary classical orders)
- Plan: plans is the Generator of Architecture, Modern Architecture requires a new type of plan.
- Regulating lines - the ordering systems in architecture as a means to an end, which should reflect modern requirements.

• Le Corbusier praised examples of 'beautiful product' that were resulting from mass production, by the assembly of standardised components - Air planes, ocean liner & automobiles.

• Dismisses study of history as irrelevant to modern architecture in the context of stylistic issues.

- warns against the plan defining form in a prescriptive manner. (predetermined symmetrical plans)

the plan 'proceeds from within to without: the exterior is the result of the interior.'

- Form should arise as 'pure creation of the mind'

- Mass production houses: context of WWI destruction aimed ~~to be~~ for new housing. Should not copy the past.
 - new modern cities.
 - bringing to an end class structure of Europe, replacing it with socialist societies ala Marx & Engels.

- Architecture needed to respond by producing Egalitarian housing types, providing maximum amenity for the inhabitants.

- Modern architecture conceived is a vehicle to deliver new political and social relations.

'Mass production spirit' houses, living, constructing; concerning mass-production houses.

'eliminate from our hearts & minds all dead concepts in regard to the house.... we shall arrive at the "House-Machine," the mass production house, healthy (a morally too) and beautiful.

(in the last fifty years)

- 'Steel and concrete have brought new conquests,'

- challenge our past.

- 'styles' no longer exist for us.

- Society was in a revolutionary mood, and that modernism architecture & city building was central to this transformation of society.

Le Corb. cont. (3)

Espirit Nouveau: the Machine from living

Dom-ino House: A rational solution to industrial housing able to produce variability of form and quality is exemplified in Le Corb's 'Dom-ino' frame,

- Concrete structural frame supporting flat concrete floors & roof slabs,
- facade can be attached to the structural frame
- facade is not load bearing, so openings can be made anywhere on the potential facade surface.
- @ concrete columns replace load bearing walls meaning considerable freedom to have variability in the floor plan arrangements.
- Flat slab roof, accessible by staircases, replaces 'lost' ground level area.

see also:

Citrohan house

5 Points of a New Architecture

1. Pilots (columns) elevating the house above the ground (recovery of ground space)
2. 'Free' plan, achieved through the separation of the load bearing columns from the walls subdividing the space
3. 'Free' facade, like the plan, a separation of columns and walls in the vertical plane
4. Long horizontal windows (that can be 'freely' arranged cos wall is not a structure).
5. Roof garden, restoring the area covered by the ground.

see also:

Villa Savoy

~~it~~ made the circulation system a dynamic spatial experience.

5 pts also applicable to cities. ~~2 cities design~~

↳ Unite de Habitation (1949) closest to realising this vision in Europe.

- 5 pts apply to entire building:
- raised above a landscaped park on 'pilotis'
- public space & facilities located on the roof.

'International Style'! - world wide spread of ^{new} architecture of 1930's.

Deutsch Werkbund architecture exhibition of the Weissenhofsiedlung in Stuttgart, Germany. → overseen by Mies, & featuring a whole host of leading designers, ... remarkably, the extent to which all applied Le Corb's 5 points.

- Architecture is stifled by custom

- free use of thick walls, was in earlier days a necessity 'has persisted, although thin partitions of glass or brick can well enclose a ground floor with 50 storeys above it.

- A standard is necessary for order in human effort.

Definition of Modern Architecture:

Functional design:

Response to programme, materials, structure.

Context: 'fixed to the place'

Form, Space and Light: 'shapes that stand in relationships to each other: 'form-types.'

Rational Method:

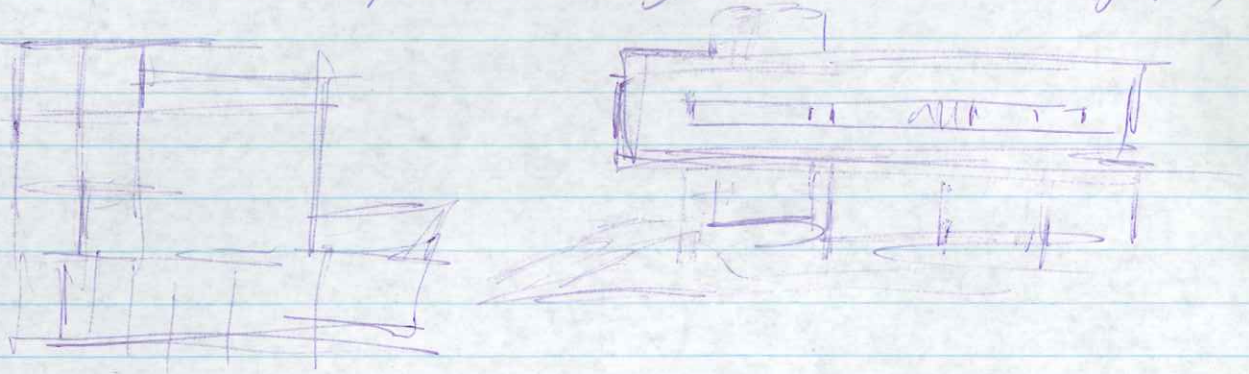
Mathematical relationships, abstraction, 'creations of the mind.'

Rational Form Type:

Le Corb (5)

- o invents his own proportioning system called the 'Modulor' (FL Wright & Japanese Tatami mats)

Geometric form and space as 'building blocks' of architecture (Gropius)



Disconnected from ground Vs. FL Wright's 'rootedness'.

- raising from ground means not having to be reliant on ground surface conditions.
- meant they could be more readily able to be mass-produced.

- no attempt at ornamentation. Everything there for a purpose.

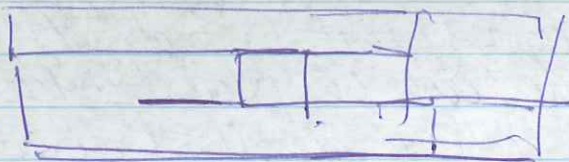
UNITE D HABITATION

LE CORBUSIER 20-25

UNITE
D HABITATION p. 227.

Parisian

- Units of Habitation
- maximum exposure to sun, facing East → West
- Stands on Pilotes, off the ground.
- Roof garden on top, set of communal spaces on roof
- access corridor only every 3rd floor,
- every unit exposed to both east & west sunlight.



interlocking system of
apartments and corridor
cross over units.

- use of primary colour
- Pedestrian street level, things like shops etc to be located at this level.
- Whole Unite is conceived as a ship, referring to 'Towards a New Architecture'
- celebration of new industrial manufacturing achievements
- landscape garden on ground.
- inscribed 5pts of architecture, on inscription, cast into the concrete

5 pts found -

- Pilotes
- Roof garden featuring communal spaces pool etc.
- free plan
- free facade

- concrete sun baffle balconies, with canopies projecting from the main body of the building.

Essential to Le Corbusier's conceptualisation of architecture was a continuity between the housing unit and the design of an entire city.

- Contemporary City (1922) an urban prototype. later developed as:
- Radiant City (Villa Radieuse) 1932

→
- VR had no population limit
- conceived of as a classless society.
- ordered by hierarchy of transportation modes that included underground rail links, elevated motorways & dedicated pedestrian routes giving access to housing units.

- Following ideas that had originally come in '5 pts of architecture' that raised the house on 'pilotis' to 'free' ground space, the entire city is elevated above ground 'freeing' this as a pedestrian domain.

- the 1st time an opportunity Unita De' Habitation was his first opportunity to construct this notion.