

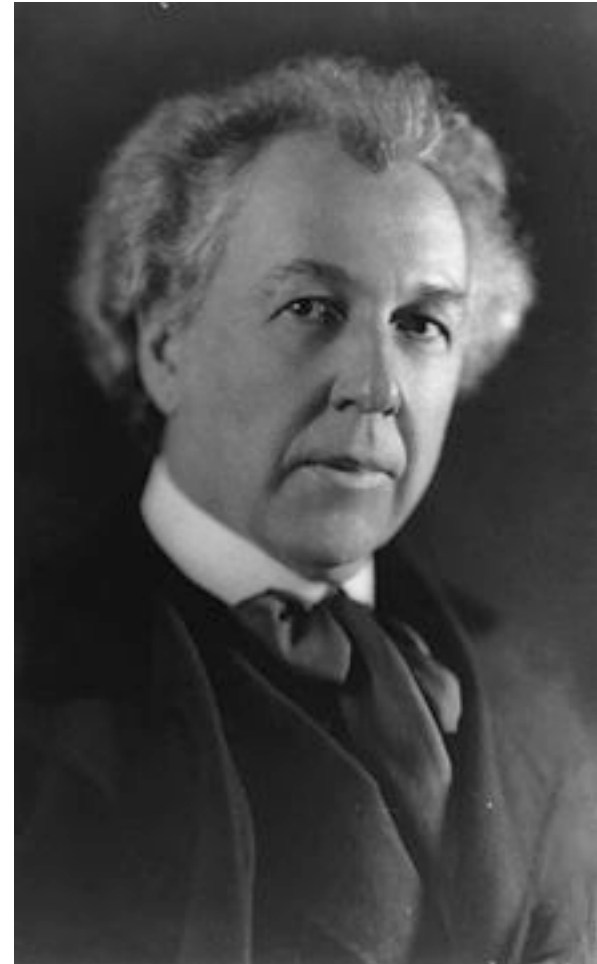
# Architectural Design Values

# Architectural design value

- **Architectural design values** make up an important part of what influences an architect and designer when they make their **design decisions**.
- The differences in values and intentions are directly linked to the pluralism in design outcomes that exist within architecture and design. It is also a **big contributing factor** as to how an architect or designer operates in his/hers relation to their clients.



All fine architectural values  
are **human values**,  
else not valuable.



[Recapitulation - The Living City (1958)]  
—[Frank Lloyd Wright](#)

# Problem Analysis vs Decision Making

- It is important to differentiate between problem analysis and decision making.
- The concepts are completely separate from one another.
- Problem analysis must be done first, then the information gathered in that process may be used towards decision making.



# Problem Analysis

- Analyze performance, what should the results be against what they actually are
- Problems are merely deviations from performance standards
- Problem must be precisely identified and described
- Problems are caused by some change from a distinctive feature
- Something can always be used to distinguish between what has and hasn't been effected by a cause
- Causes to problems can be deducted from relevant changes found in analyzing the problem
- Most likely cause to a problem is the one that exactly explains all the facts



# Decision Making

- Objectives must first be established
- Objectives must be classified and placed in order of importance
- Alternative actions must be developed
- The alternative must be evaluated against all the objectives
- The alternative that is able to achieve all the objectives is the tentative decision
- The tentative decision is evaluated for more possible consequences
- The decisive actions are taken, and additional actions are taken to prevent any adverse consequences from becoming problems and starting both systems (problem analysis and decision making) all over again

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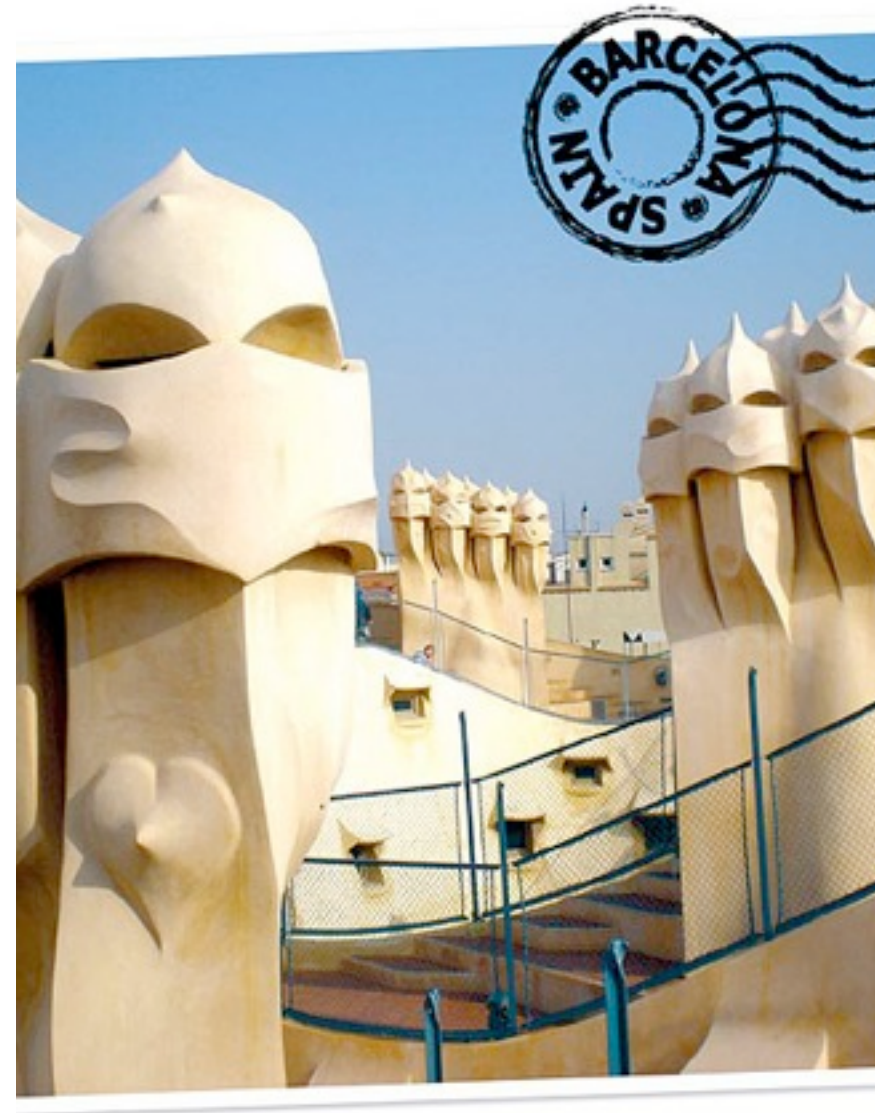
# I. Aesthetic design values

- The expansion of architectural and industrial **design ideas** and **vocabularies** took place during the last century.
- All of these aesthetic realities represent a number of divergent aesthetic values, in addition to differences in general values and theories found within architectural movements such as: **Modernism, Postmodernism, Deconstructivism, Post-structuralism, Neoclassicism, New Expressionism, Super-modernism** etc.
- These aesthetic values and their diverse aesthetic expressions are to some degree a reflection of the development that has taken place in the art community. In addition, more **general changes have taken place in Western societies**, due to technological development, new economic realities, political changes etc.
- These diverse aesthetic expressions are also a reflection of individual architects and industrial designers' personal expression, based on designers' tendency to experiment with **form, materials, and ornament** to create new aesthetic styles and aesthetic vocabulary. Changes in aesthetic styles and expressions have been, and still are, both synchronic and diachronic, as different aesthetic styles are produced and promoted simultaneously.



# I. Artistic aspects and self-expression

- It is characterized by a belief that **individual self-expression**—or one's inner spiritual self and creative imagination, inner resources and intuition—should be utilized and/or be **the base used when designing**.
- These sentiments are closely linked to a number of artistic values found in movements like **Expressionism** and the **Avant-garde art**.
- This design value is closely related to **abstract forms** and **expression, personal creative liberty, elitism** and **being ahead of the rest of society**.





## •Avant Garde: Architects

- Frank Lloyd Wright,
- Steve Baer
- Le Corbusier
- Norman Foster
- Buckminster Fuller
- Frank Gehry
- Walter Gropius
- Louis Kahn
- Rem Koolhaas
- I. M. Pei
- Ludwig Mies van der Rohe
- Eero Saarinen
- Ettore Sottsass
- Frank Lloyd Wright





## Monument to the Third International, St. Petersburg, Moscow 1920

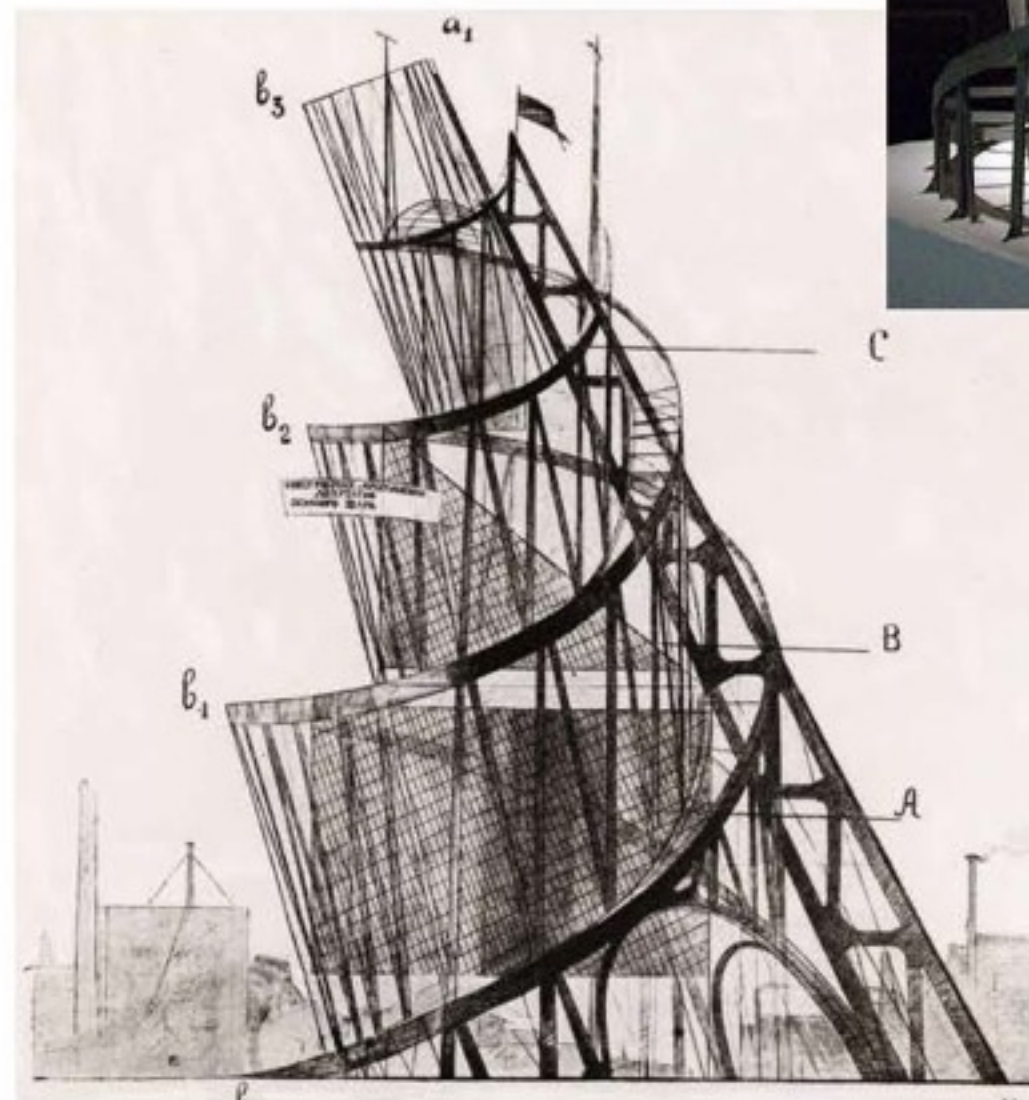
Monument, Tower (never actually built)  
**Vladimir Tatlin (father of constructivism)**

Constructivist art is committed to complete abstraction with a devotion to modernity, where themes are often geometric, experimental and rarely emotional.

a 22-ft-high (6.7-m) **iron frame on which rested a revolving cylinder, cube, and cone**, all made of **glass** which was **originally designed for massive scale**.

### CHARACTERISTICS of CONSTRUCTIVISM:

- **geometric** abstraction & pattern
- **experimental** geometry with universal meaning
- **minimal**, basic elements
- industrial material; **glass, steel and plastic**
- clearly defined arrangement
- **machine-made building parts**
- **technological details** such as antennae, signs and projection screens
- **a sense of movement**

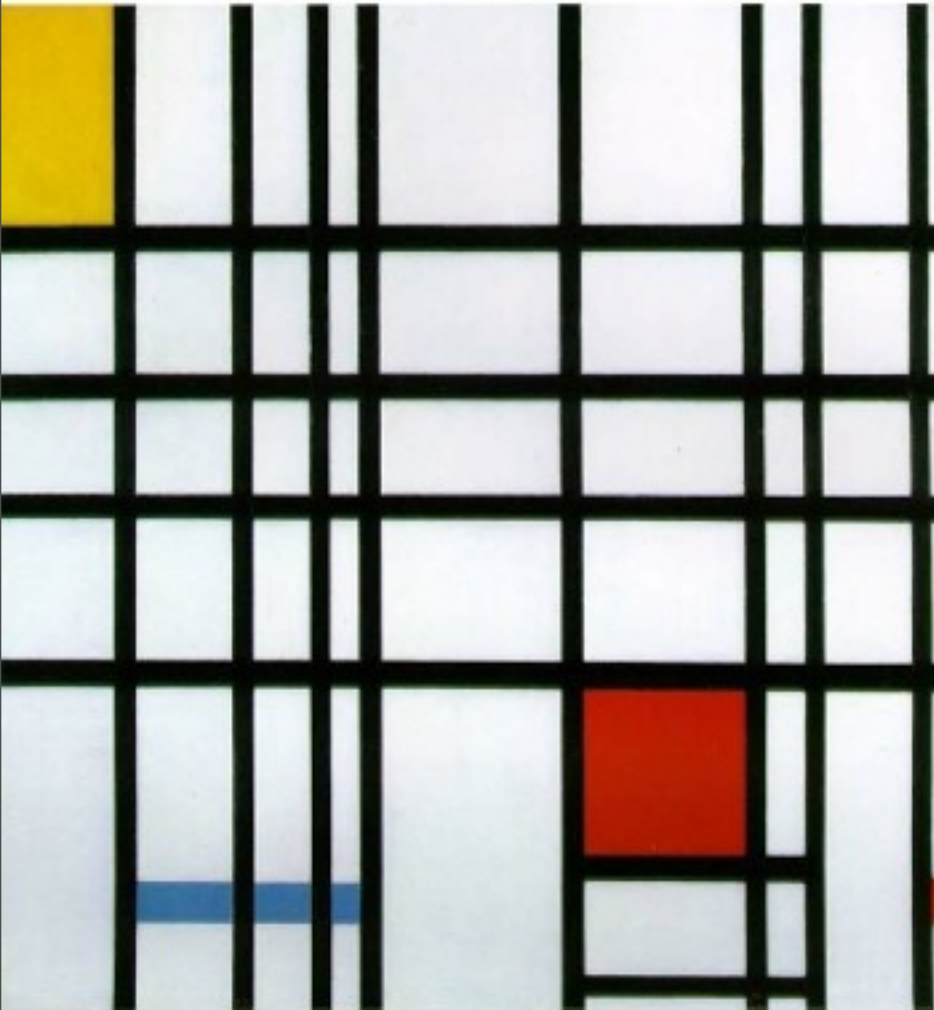


## INTERNATIONAL STYLE : CONSTRUCTIVISM



## DE STIJL (the style)

Theo van Doesburg  
Piet Mondrian  
Gerrit Thomas Rietveld



Gerrit Rietveld



Theo van Doesburg



Piet Mondrian



Founded in 1915 (Holland) by **Theo van Doesburg**, a **painter and later an architect**. Also known as "neoplasticism", the movement focusing on radical transformation of art in contrast to the "visionary + dynamic" confusion. (termed by Mendelsohn).

This **Dutch** artistic movement is based on a journal/magazine published by Theo van Doesberg ; **De Stijl** means "**The Style**". The magazine **de stijl** been a dialectic tool of a group of **commercial painters (Piet Mondrian)**, artists, architects who embraced the ideals of **rhythm, economy of expressive means, rigorous construction**.

## INTERNATIONAL STYLE : DE STIJL



# Schroder' House, Utrecht The Netherlands 1924

Resident House of Mrs. Truus Schröder-Schräder  
**Gerrit Thomas Rietveld**



As in Mondrian's paintings, the building are distinguished by **vertical and horizontal lines**, **primary colours** (red, yellow, blue) and **smooth planes**.

Designed by Rietveld for Mrs. Schroder and her three children. It become an icon of De Stijl architecture and in 2000 become one of UNESCO World Heritage Site

- Changeable **open plan**
- sliding panels & partitions
- **interlocking** planes
- Collage of **square & rectangles**
- surface with **primary values** : gray & white
- highlights using **primary colours**



**INTERNATIONAL STYLE : DE STIJL**



# CONSTRUCTIVISM

Vladimir Tatlin (father of constructivism)  
 El Lissitzky  
 Konstantin S.Mel'nikov

The constructivist are among **pioneers of photomontage**.  
 - Collage with photo and painting together.



Photomontage of illustrated Mayakovsky's poem, "**About This**," in 1923.



**Alexander Rodchenko.**  
 album cover by Franz Ferdinand (2007)



**Wolkenbügel (Cloud-iron).** 1925 A photomontage of a building designed, but never built, by Lissitzky.



**Rusakov Workers' Club** (1890-1974)  
 Konstantin Melnikov



**Melnikov House**  
 (1927-1929)  
 Konstantin Melnikov

## INTERNATIONAL STYLE : CONSTRUCTIVISM



# The Bauhaus, Dessau, German 1925

School of Architecture

Walter Gropius

**Bauhaus** = "House of Building" or "Building School"

- a school in Germany that **combined crafts and the fine arts**

- operated from 1919 to 1933

- founded by **Walter Gropius**

- founded with the idea of creating a **'total' work of art** in which **all arts would be brought together**.

- became one of the most influential currents in Modernist architecture and modern design

- influenced developments in **art, architecture, graphic design, interior design, industrial design**, and typography.

- existed in **3 German cities**:

- **Weimar** (1919-1925)

- **Dessau** (1925-1932)

- **Berlin** (1932-1933)

- 3 different architect-directors:

- **Walter Gropius** (1919-1927)

- **Hannes Meyer** (1927-1930)

- **Ludwig Mies van der Rohe** (1930-1933)

- was closed under pressure from the Nazi regime.



GROPIUS



MEYER



MIES

## INTERNATIONAL STYLE : THE BAUHAUS



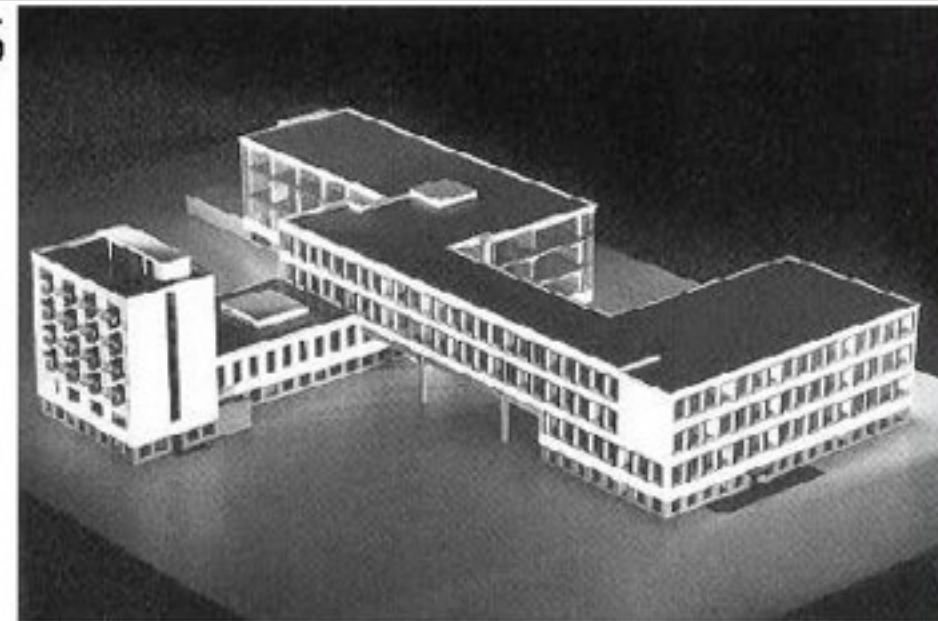
## The Bauhaus, Dessau, German 1925

School of Architecture

Walter Gropius

Bauhaus Style = International Style

- **Absence of ornamentation.**
- Harmony between **function** and **design**.
- Arts & Crafts + Technology (machines)
- **Simplified** forms
- Mass production/ **Standardized** Design
- Functionality



**Bauhaus Building (1925–26), architect: Walter Gropius**

This building, especially the School's **bright colour scheme**, brings together sharp visual dissections, **block colours** and **geometric shapes**. The building became **icon of Modernism**, its **decoration-free, clean** style, a modern approach and a special, fully built-in the architectural solution. **use of colour.**



Marcel Breuer: Wassily Chair

### Bauhaus Philosophy

- Artist should be trained to work with the industry

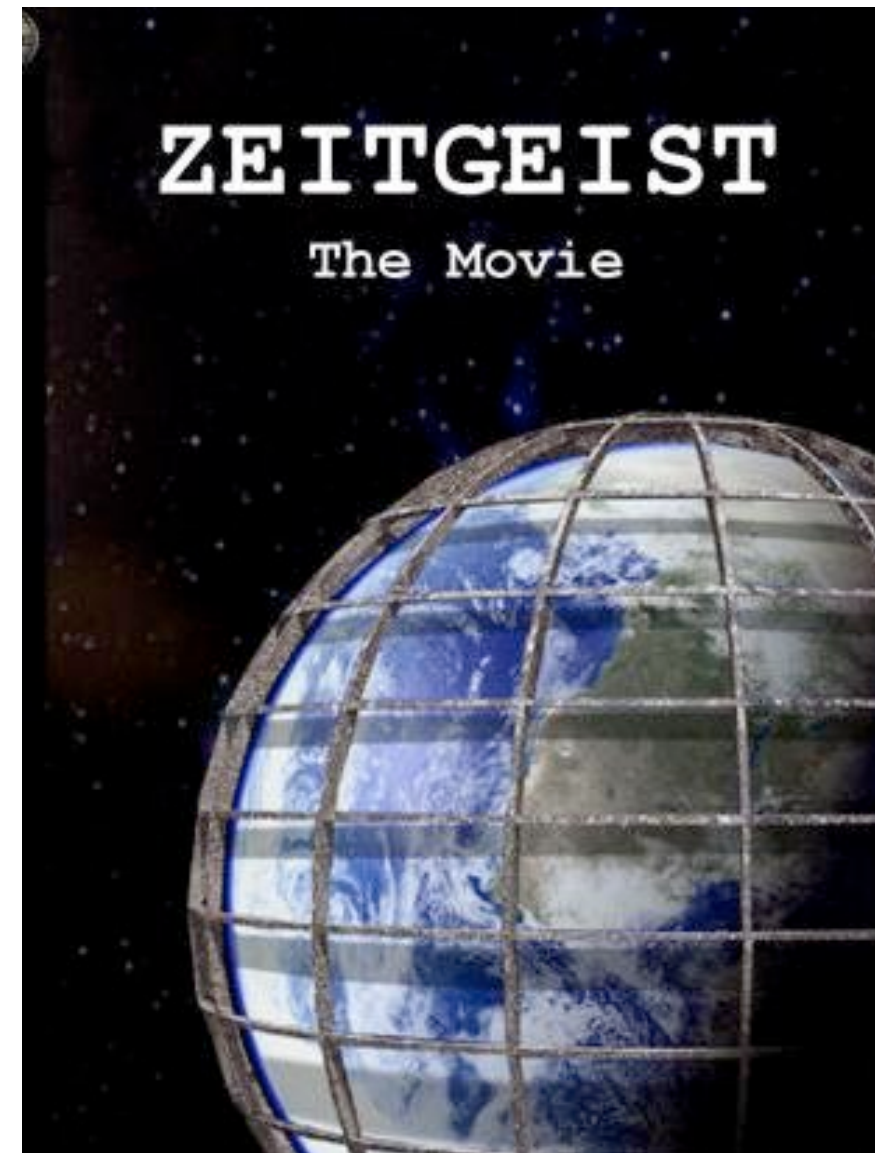


## INTERNATIONAL STYLE : THE BAUHAUS

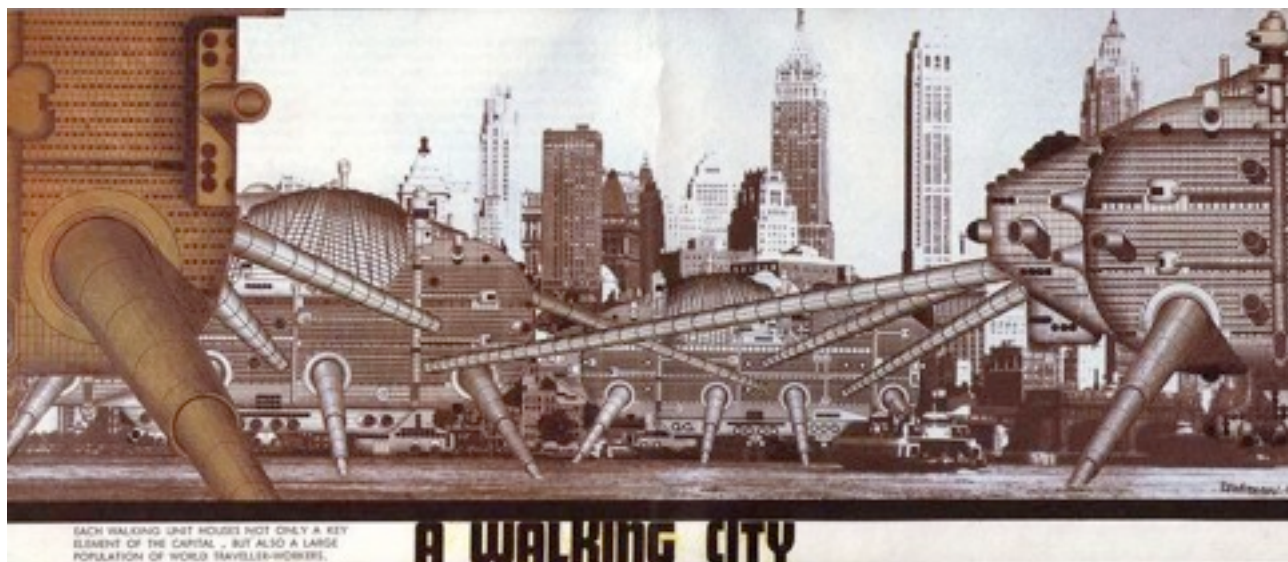
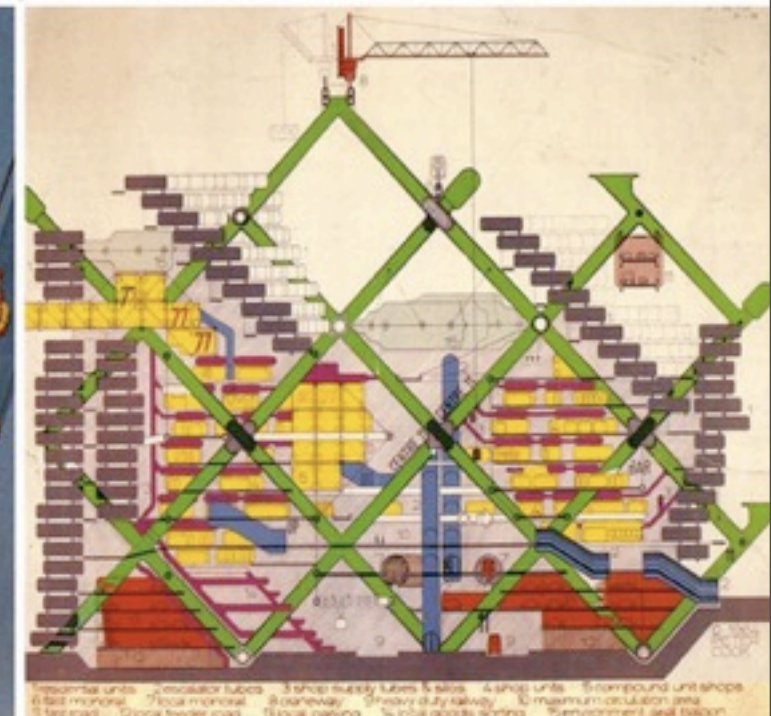
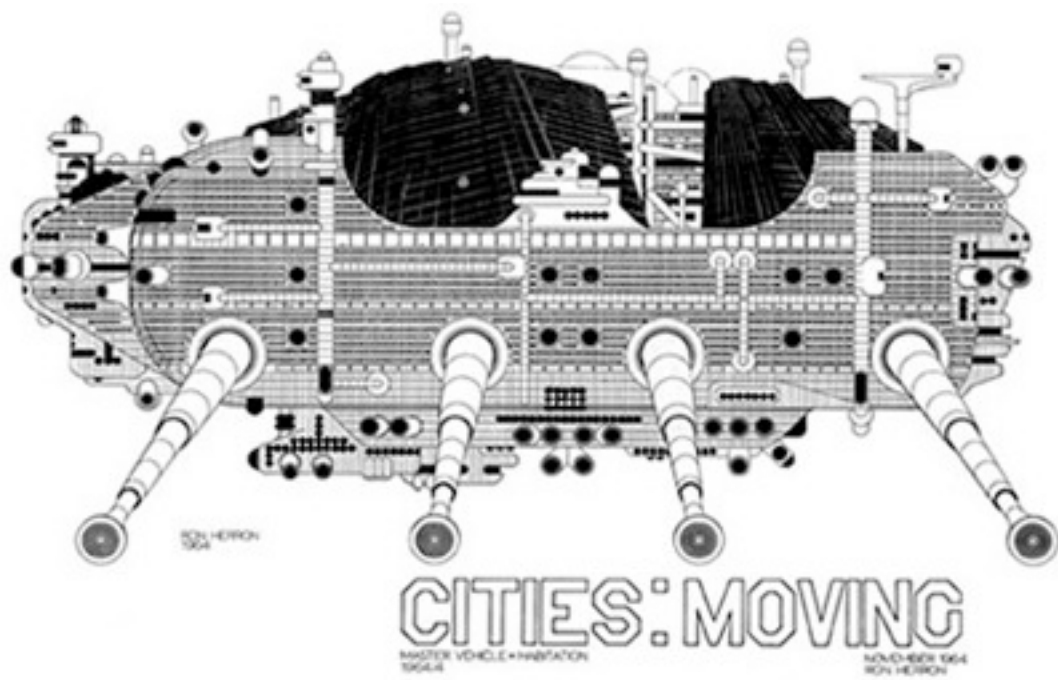


## 2. The spirit of the time design value

- This design value is based on the conception that every age has a certain spirit or set of **shared attitudes** that should be utilized when designing.
- The Spirit of the time denotes the intellectual and cultural climate of a particular era.



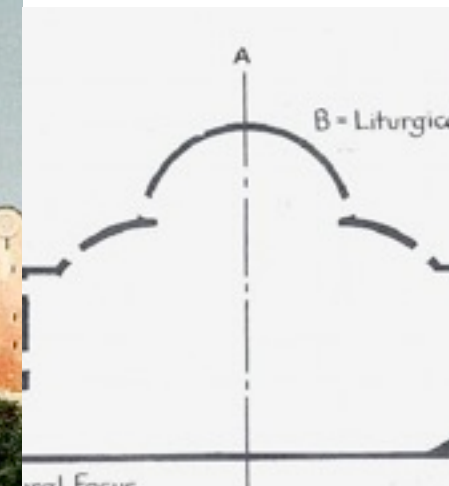




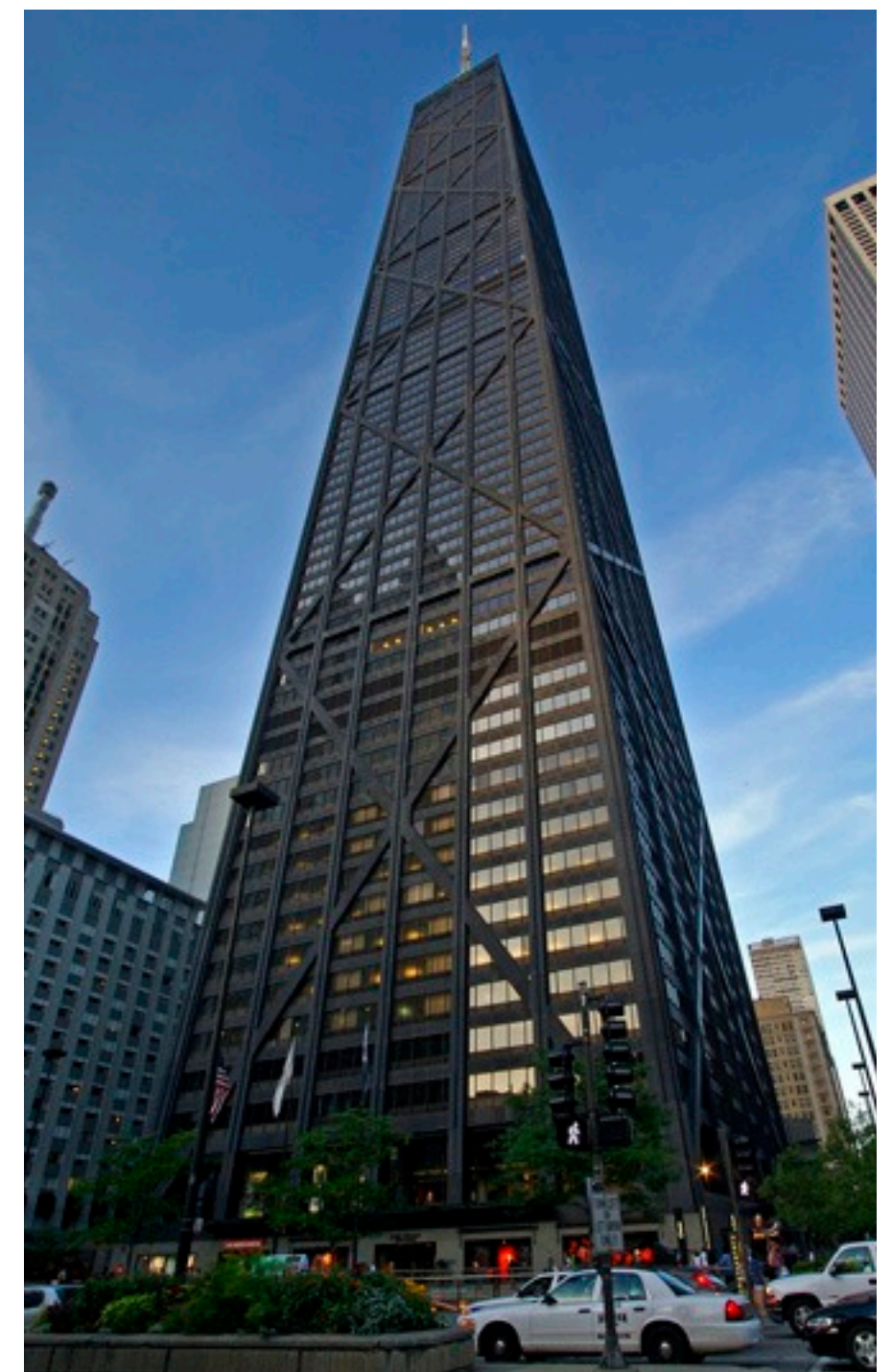


# 3. The structural, functional and material honesty design value

- **Structural honesty** is linked to the notion that a structure shall display its “true” purpose and not be decorative etc.
- **Functional honesty** is linked to the idea that a building or product form shall be shaped on the basis of its intended function, often known as “Form follows function”.
- **Material honesty** implies that materials should be used and selected on the bases of their properties, and that the characteristics of a material should influence the form it is used for.







John Hancock Center

The [Montréal Biosphère](#), formerly the American Pavilion of [Expo 67](#), by [R. Buckminster Fuller](#), on [Île Sainte-Hélène](#), [Montréal](#), [Québec](#)



# 4. The simplicity and minimalism design value

- This design value is based on the idea that **simple forms**, i.e. aesthetics without considerable ornaments, simple geometry, smooth surfaces etc., represents forms which are both truer to “real” art and represents “folk” wisdom.
- This design value implies that the more cultivated a person becomes, the more decoration disappears.
- In addition, it is linked to the notion that simple forms will free people from the everyday clutter, thus contribute to tranquillity and restfulness.





Barcelona Pavilion

- **Minimalist architects and their works**

The Japanese minimalist architect, [Tadao Ando](#) conveys the Japanese traditional spirit and his own perception of nature in his works. His design concepts are materials, pure geometry and nature. He normally uses concrete or natural wood and basic structural form to achieve austerity and rays of light in space. He also sets up dialogue between the site and nature to create relationship and order with the buildings. Ando's works and the translation of Japanese aesthetic principles are highly influential on Japanese architecture.

In Vitra Conference Pavilion, Weil am Rhein, 1993, the concepts are to bring together the relationships between building, human movement, site and nature. Which as one main point of minimalism ideology that establish dialogue between the building and site. The building uses the simple forms of circle and rectangle to contrast the filled and void space of the interior and nature. In the foyer, there is a large landscape window that looks out to the exterior. This achieves the simple and silence of architecture and enhances the light, wind, time and nature in space.

Calvin Klein Madison Avenue, New York, 1995-96, is a boutique that conveys Calvin Klein's ideas of fashion. John Pawson's interior design concepts for this project are to create simple, peaceful and orderly spatial arrangements. He used stone floors and white walls to achieve simplicity and harmony for space. He also emphasises reduction and eliminates the visual distortions, such as the air conditioning and lamps to achieve a sense of purity for interior.

[Alberto Campo Baeza](#) is a Spanish architect and describes his work as essential architecture. He values the concepts of light, idea and space. Light is essential and achieves the relationship between inhabitants and the building. Ideas are to meet the function and context of space, forms and construction. Space is shaped by the minimal geometric forms to avoid decoration that is not essential.

Gaspar House, Zahora, 1992 is a residence that client requested to be independent. High walls create the enclosed space and the stone floors used in house and courtyard show the continuity of interior and exterior. The white colour of the walls reveals the simplicity and unity of the building. The feature of the structure make lines to form the continuously horizontal house, therefore natural light projects horizontally through the building.



Tadao Ando (2004)

## Born

September 13, 1941 (age 71)

[Minato-ku, Osaka, Japan](#)

## Nationality

Japanese

## Awards

[Alvar Aalto Medal](#), 1985

[Pritzker Prize](#), 1995

RIBA [Royal Gold Medal](#), 1997

[AIA Gold Medal](#), 2002

[Neutra Medal for Professional Excellence](#),  
2012

## Practice

Tadao Ando Architects & Associates

## Buildings

Row House, Sumiyoshi, 1979

[Church of the Light](#), Osaka, 1989

Water Temple, Awaji, 1991

## Projects

Rokko Housing I, II, III, Kobe, 1983-1999



- The Japanese minimalist architect, Tadao Ando conveys the Japanese traditional spirit and his own perception of nature in his works.
- His design concepts are materials, pure geometry and nature. He normally uses concrete or natural wood and basic structural form to achieve austerity and rays of light in space.
- He also sets up dialogue between the site and nature to create relationship and order with the buildings. Ando's works and the translation of Japanese aesthetic principles are highly influential on Japanese architecture.





## John Pawson

### Born

May 6, 1949 (age 63)

[Halifax, England](#)

### Occupation

author, architect

### Subjects

[architecture](#), [simplicity](#)

### Spouse(s)

Catherine Pawson

- John Pawson is a British minimalist architect, his design concepts are soul, light and order.
- He believes that though reduced clutter and simplification of the interior to a point that gets beyond the idea of essential quality, there is a sense of clarity and richness of simplicity instead of emptiness.
- The materials in his design reveal the perception toward space, surface and volume. Moreover, he likes to use natural materials because of their aliveness, sense of depth and quality of individual.
- He is also attracted by the important influences from Japanese Zen Philosophy.

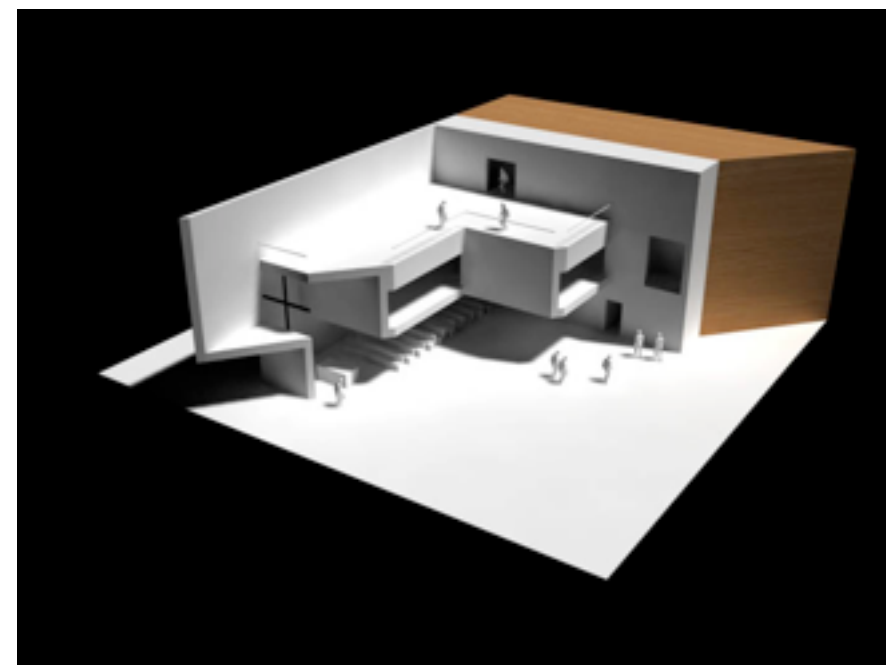


## **Alberto Campo Baeza**

(born Valladolid, 1946) is a Spanish architect.

He took classes at the E.T.S. Arquitectura de Madrid, and graduated in 1971.

He is currently a professor at the University of Pennsylvania.



- Alberto Campo Baeza is a Spanish architect and describes his work as essential architecture.
- He values the concepts of light, idea and space. Light is essential and achieves the relationship between inhabitants and the building.
- Ideas are to meet the function and context of space, forms and construction. Space is shaped by the minimal geometric forms to avoid decoration that is not essential.



# 5. The nature and organic design value

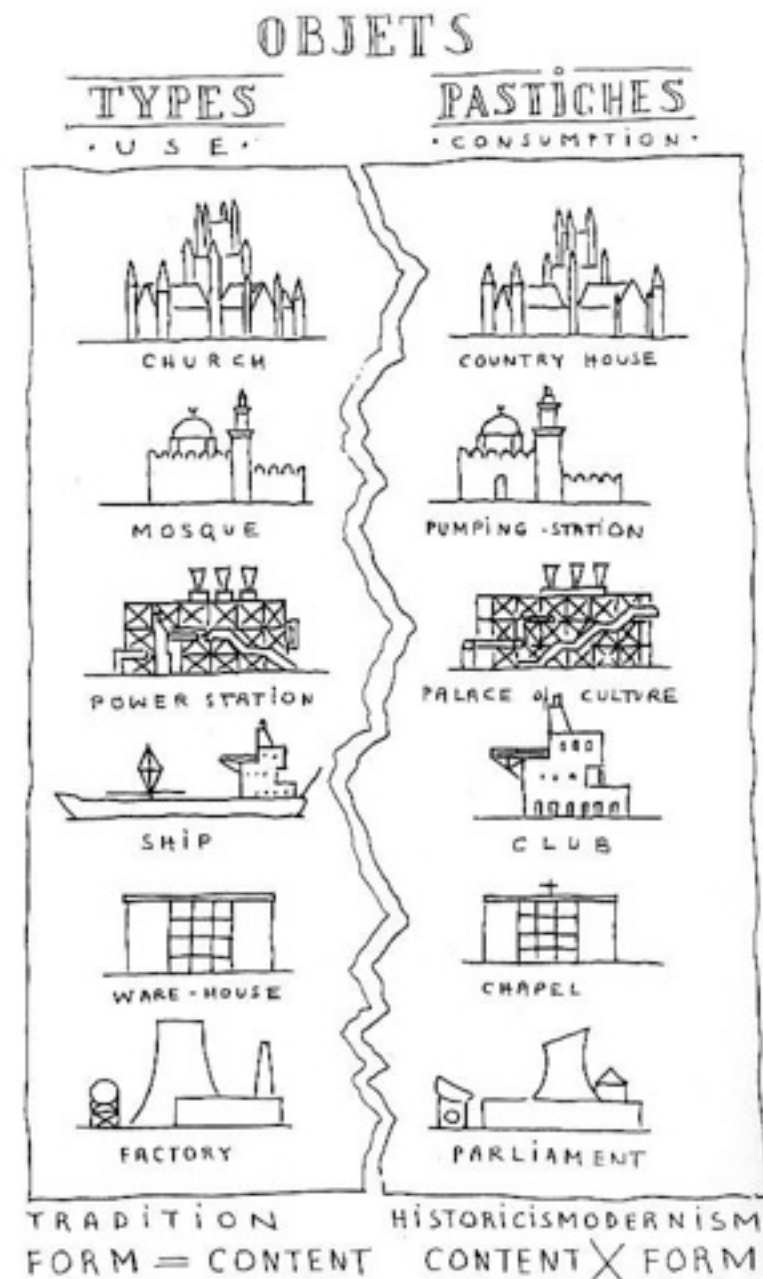
- This design value is based on the idea that nature(i.e. all sorts of living organisms, numerical laws etc) can provide inspiration, functional clues and aesthetic forms that architects and industrial designers should use as a basis for designs.
- Designs based on this value tend to be characterized by **free-flowing curves, asymmetrical lines and expressive forms.**
- This design value can be summed up in “**form follows flow**” or “**of the hill**” as oppose to “**on the hill**”.



OFF Architecture, along with Duncan Lewis Scape Architecture and Jeans Giacinto, has completed the design for the reconstruction of Lycee Jean Moulin in Revin, France

## 6. Classic, traditional and vernacular aesthetics design value

- This value is based on a belief that a building and product should be **designed from timeless principles** that transcend particular designers, cultures and climates.
- Implicit in this design value is the notion that if these forms are used, **the public will appreciate a structure's timeless beauty and understand immediately how to use a given building or product.**
- This design value is also linked to **regional difference** i.e. varying climate etc. and folklore cultures, which creates distinctive aesthetical expressions.



# 7. The regionalism design value

- This design value is based on the belief that building—and to some degree products—should be designed in accordance with the **particular characteristics of a specific place**.
- In addition, it is linked to the aim of achieving **visual harmony** between a building and its **surroundings**, as well as achieving continuity in a given area.
- In other words, it strives to create a connection between past and present forms of building. Finally, this value is also often related to preserving and creating regional and national identity.





# II. Social design values

- Many architects and industrial designers have a strong motivation to serve **the public good** and **the needs** of the user population.
- Moreover, social awareness and social values within architecture and design reflect, to some degree, the emphasis these values are given in society at large.



# I. The social change design value

- This design value can be described as a **commitment to change society for the better** through architecture and industrial design.
- This design value is closely connected and associated with **political movements** and **subsequent building programs**.
- Architects and industrial designers that are committed to the design value of social change often see their work as a tool for transforming the built environment and those who live in it.



## 2. The consultation and participation design value

- This design value is based on a belief that it is beneficial to involve **stakeholders** in the design process.
- This value is connected to a belief that user involvement leads to:
  1. Meeting social needs and an **effective use of resources**.
  2. Influencing in the design process as well as awareness of the consequences etc.
  3. Providing relevant and up-to-date information for designers.





### 3. The crime prevention design value

- This design value is based on the belief that the built environment can be manipulated to **reduce crime levels**.

1. Defensible space
2. Crime prevention through environmental design
3. Situational crime prevention



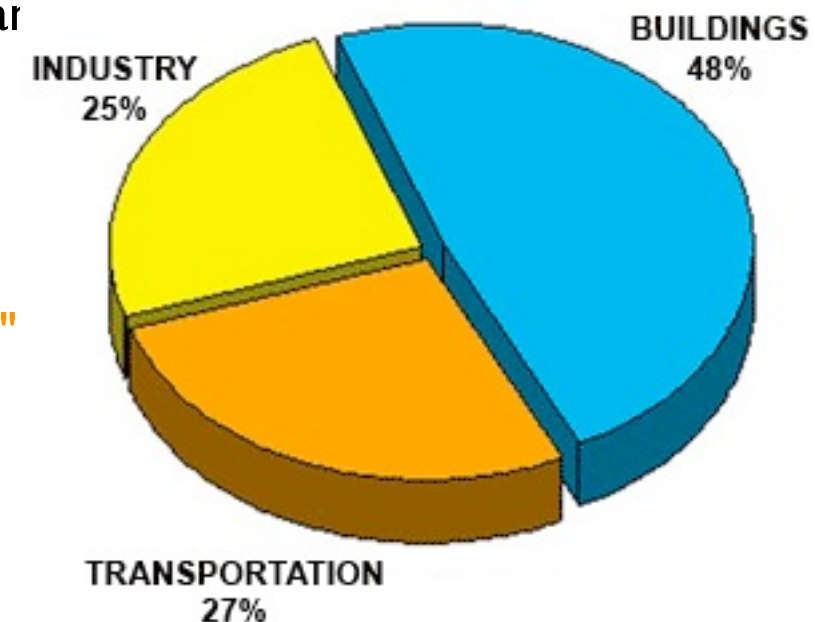
## 4. The 'Third world' design value

- This is based on an eagerness to **help developing countries** through architecture and design (i.e. a response to the needs of the poor and destitute within the Third World).
- This design value implies that social and economic circumstances found in the Third World necessitate the development of special solutions, which are distinct from what the same architects and industrial designers would recommend for the developed world.



# III. Environmental design values

- The 20th century has been marked by the re-emergence of environmental values within Western societies.
- Environmental problems and challenges found in the 19th and 20th centuries led to a development where environmental values became important in some sections of Western societies.
- The focus on environmental design has been marked with the rediscovery and further development of many “ancient” skills and techniques.
- New technology that approaches environmental concerns is also an important characteristic of the environmental approach found among architects and industrial designers.
- Many cities have started to formulate and introduce "eco-regulations concerning renewable resources, energy consumption, sick buildings, smart buildings, recycled materials, and sustainability"
- This maybe not be surprising, as about 50% of all energy consumption in Europe and 60% in the US is building-related.



# I. The green and sustainability design value

- This value is based on a belief that a **sustainable** and/or **environmentally friendly building** approach is beneficial to users, society and future generations.
- Key concepts within this design value are: **energy conservation, resource management, recycling, cradle-to-grave, toxic free materials etc.**

## *The Three Spheres of Sustainability*



## 2. The design value of re-use and modification

- belief : existing buildings, and to some degree products, can be **continuously used through updates.**
- two separate schools of thought with regards to aesthetics:
  - new elements that are sublimated to an overall aesthetic
  - aesthetical contrast, dichotomy and even dissonance between the old and the new.





# 3.The health design value

- belief : the built environment can contribute to ensuring a **healthy living environment**.
- buildings should be freestanding; sites need to be distributed to maximize the amount of sunlight that reaches individual structures..
- emphasis on health based construction and reduction of toxic emissions through selection of appropriate materials.

High Contect



# IV. Traditional design values

- a long tradition of being both inspired by and re-use design elements of existing buildings and products.
- be inspired by existing building and products traditions, and have even used this inspiration as the main base for their designs solutions.
- This design tradition has a considerable history
- Classicism, Vernacular, Restoration and Preservation etc
- “Classic, Traditional and Vernacular aesthetics”, an important element of this tradition is to re-use and be inspired by already existing aesthetical elements and styles.

# I. the tradition base design value

- traditional “designs” are the preferred typology and template for buildings and products, because they “create” timeless and “functional” designs.

1. **Critical traditionalist**/regionalist i.e. interpreting the traditional typologies and templates and applying them in an abstracted modern vocabulary.
2. **Revivalists** i.e. adhering to the most literal traditional form.
3. **Contextualists** whom use historical forms when the surroundings “demands” it.





## 2. The design value of restoration and preservation

- preserve the best of buildings and products for future generations.
  - represent restoring a building or product to its initial design
1. **An archaeological perspective** (i.e. preserving buildings and products of historical interest).
  2. **An artistic perspective** i.e. a desire to preserve something of beauty.
  3. **A social perspective** (i.e. a desire to hold on to the familiar and reassuring).



# 3 The vernacular design value

- a simple life and its design, closely linked to nature, are superior to that of modernity.
1. **Reinvigorating tradition** (i.e. evoking the vernacular).
  2. **Reinventing tradition** i.e. the search for new paradigms.
  3. **Extending tradition** i.e. using the vernacular in a modified manner.
  4. **Reinterpreting tradition** i.e. the use of contemporary idioms.



# V. Gender-based design values

- the feminist movement and theory developed within the 19th and 20th centuries
1. Gender differences related to critique and reconstruction of architectural practice and history.
  2. The struggle for equal access to training, jobs and recognition in architecture and design.
  3. The focus on gender based theories for the built environment, the architectural discourse, and cultural value systems.





# VI. The economic design value

- often geared towards achieving successful design quality rather than achieving successful economic expectations.
  - This is the basis for a design value that can be characterised as 'voluntarism' or 'charrette ethos'.
1. Best design works comes from offices or individual designers which are willing to put in overtime (sometimes unpaid) for the sake of the design outcome.
  2. Good architecture and design is rarely possible within fees offered by clients.
  3. Architects and designers should care enough about buildings or products to uphold high design standards regardless of the payment offered.

# VII. The novel design value

- emphasis on creating novel design solutions.
- The novel design value has historical roots dating back to early design movements such as Modernism, with its emphasis on “starting from zero”.
- The celebration of original and novel design solutions is, by many designers and design scholars, considered one of the main aspects of architecture and design. This design value is often manifested through the working methods of designers. Some architects and designers with their emphasis on the “big idea” will have a tendency to cling to major design ideas and themes, even if these themes and ideas are faced with insurmountable challenges. However, the emphasis on design novelty is also associated with progress and new design solutions that, without this emphasis, would not see the light of day.
- The design value of novelty is not generally accepted within either architecture or design. This is indicated by the debate in architecture, focusing on whether buildings should harmonize with the surroundings in that they are situated in or not. Equally is the debate where architecture should be based on traditional topology and design styles i.e. classical and vernacular base architecture or if it should be an expression of its time. The same issues are indicated within the industrial design domain where it has been debated if retro design should be accepted or not as good design.

# VIII. Mathematical and Scientific design values

- design on scientific and mathematical understanding started with the early work of [Christopher Alexander](#) in the 1960s, [Notes on the synthesis of form](#).
- Bill Hillier's [Space syntax](#) and Michael Batty's work on [Spatial analysis](#).
- Social and environmental issues are given a new explanation, drawing upon biological phenomena and the interactivity of groups and individuals with their built environment.
- The new discipline of [Biophilia](#) developed by [E. O. Wilson](#) plays a major role in explaining the human need for intimate contact with natural forms and living beings. This insight into the connection between human beings and the biological environment provides a new understanding for the need for ecological design. An extension of the biophilic phenomenon into artificial environments suggests a corresponding need for built structures that embody the same precepts as biological structures. These mathematical qualities include fractal forms, scaling, multiple symmetries, etc.. Applications and extensions of Wilson's original idea are now carried out by Stephen R. Kellert in the [Biophilia hypothesis](#), and in by [Nikos Salingaros](#) and others in the book "Biophilic Design".