

DOES AN ARCHITECT HAVE A RESPONSIBILITY TO THE ENVIRONMENT, OR JUST
TO BEAUTY?

By

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Modern architecture is a phenomenon that has gained increased attention over the last century with many stating it is a resultant phenomenon of the industrial revolution. However, other schools of thought state that architecture is majorly based on evolution not revolution, and the new ways of construction are influenced from past designs. Construction designs used before the 18th century were believed to be influenced by functionality, on the other hand, the structures built after this period are known for embracing beauty. This though is not a shared vision with contemporary architects claiming that though today's buildings are based on beauty they are equally functional. This paper centers its discussion on the above argument highlighting on the responsibilities of an architect with the environment, beauty as well as functionality being the core of the dialogue.

Architecture has gone through significant changes over the last hundred years in comparison to the Middle Ages, to the buildings seen today representing the 20th to 21st centuries. Modernity as well as modern architecture has played and continues to play a major role in the society. On the other hand, the emergence of modernism in the architectural field has brought about controversies surrounding the responsibilities of an architect. Modern architecture is defined as the use of multifaceted methods of construction that has been used since the late 18th century and consist of varied cultural, social, artistic as well as economic contexts¹. During the 1920s in both Europe and the United States, a rare phenomenon in the history of architecture was taking place suggesting an overthrow to previous construction styles². Machines had brought about the use of materials such as glass, concrete as well as steel beams and consequently

¹ Nishat, Awan, Schneider, Tatjana and Till Jeremy. *Spatial agency: other ways of doing architecture*. Routledge, 2013.

² Richard A. Etlin. *Frank Lloyd Wright and Le Corbusier: the romantic legacy*. Manchester: Manchester Univ. Press.

revolutionizing building techniques³. In the process, the idea of beauty and factuality became a controversial aspect in building. In most circumstances, beauty became a substitute of functionality a factor that to this date is highly debated. However, this has not been an obvious case considering other forms of modern architecture have both highlighted beauty and functionality. This concept predominantly applies to *Le Corbusier* as well as *Frank Lloyd Wright* ideas of construction. *Le Corbusier* philosophy of beauty, imaginative world included a vision of nature allowing a structure to stand out from its environment⁴. In other words, allowing the site to be a canvas highlighting a building's beauty. On the other hand, *Frank Lloyd Wright* views beauty as creating a relationship between structure and the environment to the point they look as one natural phenomenon⁵. As both individuals express themselves, their buildings are highly functional.

The 20-century signified the era of architecture in the United States that was distant from humanity and nature and majorly based on functionality. After the Second World War, the US economy went through a boom, causing suburban development to increase in order to match with growing public demand. From this, architects primarily based their designs on functionality rather than beauty. As the cities grew, suburbia became the most preferable destination for many; however, a primary factor about architecture had been lost (*Figure 1*). Beauty in reference to what modern architects such as Walter Gropius was replaced by functionality and the art part of building a structure vanished⁶. The obligation of architecture is core to any discussion set to

³ Peter, Collins, *Changing ideals in modern architecture, 1750-1950*. Montreal: McGill-Queens University Press. 1998.

⁴ Bachelard, Gaston, and Maria, Jolas, *The poetics of space*. Vol. 330. Beacon Press, 1994.

⁵ Franklin. Toker. 2003. *Fallingwater rising: Frank Lloyd Wright, E.J. Kaufmann, and America's most extraordinary house*. New York: A.A. Knopf.

⁶ Alan, Colquhoun. *Modern architecture*. Oxford [u.a.]: Oxford Univ. Press. 2002.

solve social as well as environmental issues; nonetheless, the ability of modern architects seems to have lost the creativity of producing both environmentally friendly as well as beautiful structures. Architecture in the 20th century lost the aesthetics of traditional building and only centered on making pleasant interiors that were based on purpose overlooking the environment they were in. The 21st century is also taking a similar turn considering the issues of global warming. The use of eco-friendly material has taken a higher priority than beauty, a factor questioned by early architects such as Frank Lloyd Wright and Le Corbusier.

Frank Lloyd Wright's philosophy in Architecture is based on blending the surrounding landscape with the structures consequently suggesting that the building should be uniquely connected to the site, that the structure would look out of place elsewhere. Of the above statement, none of Frank Lloyd Wright constructions is more connected to its environment than the Falling Water House (*Figure 2*). . Constructed between 1936-1938, the structure is located at Bear Run Valley in Southern Pennsylvania; the building was planted on the waterfall unlike the initial idea of making it face the natural phenomenon⁷. The building was constructed by only using four materials namely; sandstone, steel, glass as well as reinforced concrete. The plan of the structure was placed in a way that in places where glass met stone no metal beam was used. The structural design was placed to host a significant number of individuals connecting them to the adjacent forest with horizontal windows that increase the lighting of the house. Most of the bricks used in the construction were taken from the quarry that is situated west of the house additionally the rocks were placed in a rough and shifting manner giving a notion of the building coming from the ground. In addition to this, the first and second floors were extended using

⁷ Frank Lloyd, Wright, and Hoffmann, Donald. *Frank Lloyd Wright's Fallingwater: the house and its history*. New York: Dover Publ. 1993.

metal pillars and beams making up terraces on three sides of the building inviting the forest to become part of the building⁸ (*Figure 3*).

Constructed in the 1930s the Villa Savoye stands out in a long list of Corbusier's structures and is thought to be a core influence of international modernism. The Villa Savoye stands as one of a kind since it covered the 'Five Points of Architecture' presented by Corbusier to represent beauty and cohesion with the environment⁹. The architectural design involved the use of pilotis that elevated the entire structure from the ground; consequently, allowing a continuity of the garden; the building's roof played a functional role as it served as a garden as well as terrace helping reclaim the ground covered by the villa (*Figure 5*). Villa Savoye is served by long horizontal windows that increase the lighting as well as provide a picturesque view of the environment, this being complimented by the free wall plan that reveals the load-bearing wall as well as a spacious view of the interior that is aesthetically well placed to invite the outdoors indoors¹⁰. Finally, a freely designed frontage matching with the load-bearing wall represents the walls. Dissimilar to the other town villas, the Villa Savoye is inspired by the view of the orientation of the sun catching a glimpse of it through all four sides of the structure¹¹ (*Figure 6*).

From the two structures presented, there is a striking similarity for the architects to both incorporate the environment to their structure. According to Frank Lloyd Wright, the house has to share the beauty of the surroundings and it should work to be one object and not stand out

⁸ Frank Lloyd Wright, and Hoffmann, Donald. *Frank Lloyd Wright's Fallingwater: the house and its history*. New York: Dover Publ. 1993.

⁹ Jean-Louis, Cohen, and Corbusier, Le. *Le Corbusier, 1887-1965: the lyricism of architecture in the machine age*. Hong Kong: Taschen. 2006.

¹⁰ Jacques Sbriglio. *Le Corbusier: the villa Savoye*. Paris: Fondation Le Corbusier.

¹¹ Nikolaas John, Habraken and Teicher, Jonathan. *The structure of the ordinary: form and control in the built environment*. MIT Press, 2000.

alone. On the other hand, the use of pilotis as well as a multi-functional roof makes the structure blend with its surroundings; however, in an artificial manner. The two designs differ in the sense that Wright uses a wide variety of construction materials to make sure the building matches its surroundings; nonetheless, Corbusier does not take a similar notion considering that he uses nature's beauty to compliment the structure that stands out on its own¹².

According to Frank Lloyd Wright, an architect is primarily obligated to fuse the environment with the building. Wright's architectural style can be traced to be a mix of a number of naturally conservative styles; for instance, what is popularly known as Organic Architecture as presented by Wright is a derivative of the confined closed-in Victorian era architecture; textile style of the Mayan architecture; as well as use of natural resources adopted by Japanese architecture. In essence, the structure flows with the environment and this he expects from all architects¹³. Le Corbusier on the other hand does not perceive architectural responsibility to the environment but to beauty. To him the structure does not have to blend with or complement its surroundings; however, it has to use the environment to enhance the visual effect of the building. The 'five-point' rule presented by Le Corbusier is all based on using the features of the outdoors to compliment the beauty of a structure triggering relaxation, luxury as well as serenity.

In summary, the modern version of architecture that is derived from the reaction of architects such as Frank Lloyd Wright, Walter Gropius, Le Corbusier as well as Ludwig Mies der Van Rohe is the reduction of décor and art pieces to bring out the beauty in a house. These architects used the structure itself as a symbol of beauty using the environment around them to

¹² Paul-Alan. Johnson. *The theory of architecture: concepts, themes & practices*. New York: John Wiley & Sons. 1994.

¹³ Frank Lloyd, Wright, and Hoffmann, Donald. *Frank Lloyd Wright's Fallingwater: the house and its history*. New York: Dover Publ. 1993.

help highlight on the art of a house either using the environment as a canvas to display beauty or use the structure to complement the landscape. In this paper, the use of Frank Lloyd Wright's Falling Water House as well as Le Corbusier's Villa Savoye show how two masters of Architecture use the environment as a standard medium in connection to architecture. In the case of Frank Lloyd Wright's Falling Water House the structure compliments the environment growing in picture and not standing out, on the other hand, the Villa Savoye stands out from its background using nature to enhance its beauty in a secondary manner giving the house a personality. From the two structures, it is evident that the environment is a significant underlying factor that enhances beauty; however, the different philosophies employed by the two architects differs. In conclusion, the modern architectural fashion is based on preference and there is no standard rule on an architect's obligation to the environment; nonetheless, it is important to consider the surrounding of a building as it plays a core role to enhance a buildings beauty.

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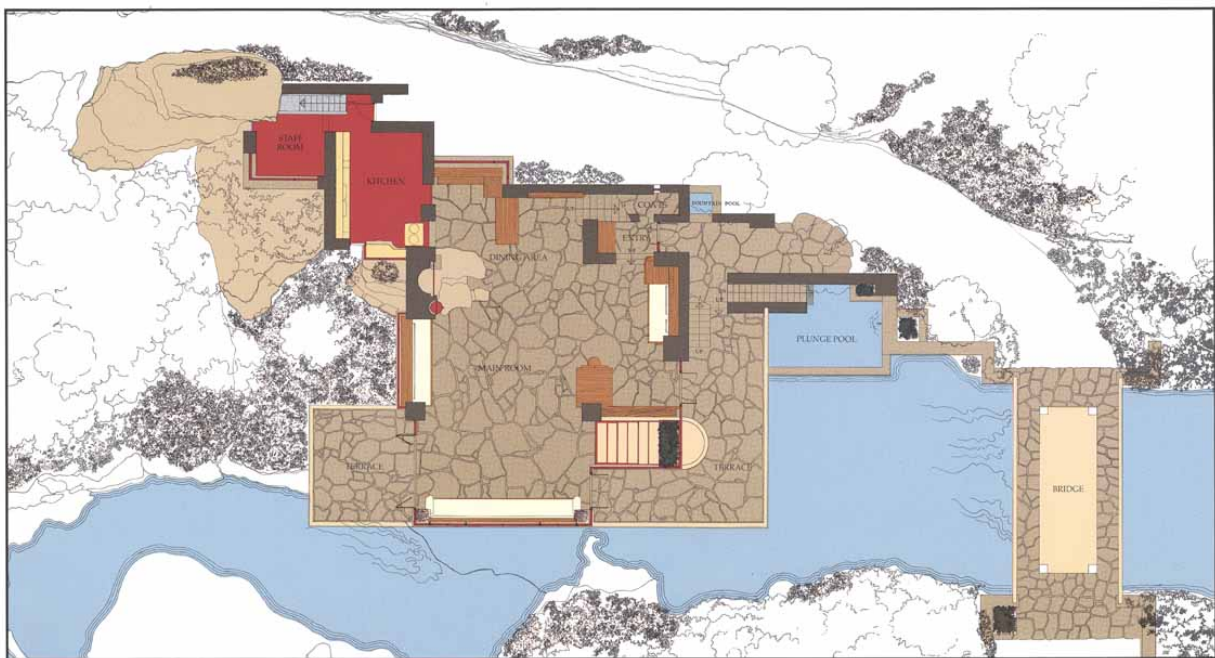
Images



(Figure 1) Long Island's Levittown Suburb, 1951



(Figure 2) Falling Water House, Frank Lloyd Wright, Southwestern Pennsylvania, 1935



FALLINGWATER

MAIN FLOOR PLAN

(Figure 3) Falling Water House, Master Floor Plan, Southwestern Pennsylvania, 1935



(Figure 4) Falling Water House, Interior, Southwestern Pennsylvania, 1935



(Figure 5) Villa Savoye, Le Corbusier, Poissy, France, 1928-1931



(Figure 6) Villa Savoye, Interior Views, Le Corbusier, Poissy, France, 1928-1931