

An Exemplar of Modern Architecture – Falling Water

Throughout the 20th and 21st centuries, there have been a mass of exemplary pieces of modern architecture that demonstrate how far society has come in the last couple hundred years, this essay is going to discuss one in particular; Falling Water designed by Frank Lloyd Wright. Falling Water was designed by Wright in 1935 for the Kaufmann family and the building was fully completed by 1937 (Zelazko, 2017). It was originally a family home however due to its sheer beauty and magnificence; it was later opened as a museum in 1964. A famous tale to come from falling water is that the original drawings and designs were completed by Wright during his 140 mile car journey from Milwaukee to Taliesin in roughly two hours or so as he had procrastinated for nine months before hand (Wiebe, 2015). However, Wright's apprentice Edgar Taffel seems to recall Wright immediately after being on the phone to Kaufmann started drawing and the ideas kept flowing and Wright had a full complete design of the building within two hours or so from being on the phone to Kaufmann. The building itself was erected in Mill Run, Pennsylvania, in the Bear Run Nature reserve as a family retreat for the Kaufmann's. The family had been going to this spot in the Nature Reserve for years as a sort of get away location, and it is said that is why they decided to commission Wright to design the weekend retreat to have a view of the waterfall, never did they expect Wright to design the house that's virtually part of the waterfall itself (Perez, 2010).

Below is an image (1a) showing the section through the building as well as a floor plan and layout of both floors within the building. First impressions of the building shows that it has three main floors to the building as shown in the section drawing, the bottom floor consisting of rooms 1 and 2, the middle floor consisting of rooms 3 and 4 followed by the third floor consisting of rooms 5 and 6. Straight away this shows me that the ground floor (1b) is a very spacious area with an open plan interior. This creates a very free flowing atmosphere within the structure to maximise the space. It can be argued that this is a perfect design for this building as the whole tone of the structure and its surroundings is to attempt to be at one with nature and the surrounding area, and said open plan gives the sense of being free and able to move willingly from one room to the next without feeling boxed in or enclosed (Liddar, 2018). However, despite the ground floor being an open plan floor, the second floor allows for far more privacy within the structure. Obviously, one of the drawbacks of having an open plan building is that it lacks the capacity to provide rooms for 'a quiet five minutes' or some privacy in general. Therefore the second floor (1c) of falling water is designed perfectly to coincide with the ground floor as it counteracts the open plan with the more standard design for bedrooms. There is guest room and master bedroom on the floor that allow for the privacy that may be desired, along with a dressing room. The bedrooms are positioned in such a way that each bedroom has its own en suite, and its own access to an open top terrace. This allows for the occupants of each rooms to have the privacy they need as well as the opportunity to experience the surroundings from a different level. Finally, the third floor (1d) consists of a study room, along with a general

relaxation area. This floor is perhaps the most sought after floor of the whole building, with the best views of the surroundings and the highest point of the building. It can be argued that the study has been placed on this floor intentionally as being situated at the highest point of the building it is surrounded by inspiration for any work being done within the study. It will likely be the quietest floor of the house as it only really consists of the study along with the relaxation area in the landing, this would again be perfect for home working when away from the office as the Kaufmann's would likely be due to the fact this was their holiday home. Finally, upon studying the section drawing (1a) it shows us that Wright has really delved deep into the surroundings of Falling Water as the various levels of the building really coincide with the change in levels of the water fall and landscape around it. This really adds to the overall design of the building being organic with the surroundings and really looking like it blends in with the background rather than standing out in the foreground. Furthermore, the structure could possibly be protected from north-westerly winds as the section shows the building almost eats into the higher level ground, therefore the wind travels over the structure rather than against the below levels.

It's no secret that falling water blends in with its surroundings extremely well and adds to the aesthetic of the general area, and this was achieved partially by the materials used to construct the building. There were four main materials used; sandstone, reinforced concrete, steel and glass (AD Classics: Fallingwater House / Frank Lloyd Wright, 2015). The masonry work on the exterior walls plays a huge part in the organic nature of the building. The sandstone used in the walls was mined from a nearby quarry and was laid in a rough, overlapping manner to imitate the natural forms of rock all around the building (About - Fallingwater, 2015). Some of the stones overrun the mortar by a few inches, and this is to create the effect that falling water is naturally occurring and growing from the landscape rather than being placed there. The use of glass adds to the general tone and atmosphere of the building as it creates the illusion of unity from the inside and out. It allows the inhabitants to experience the close, personal connection to nature and the surrounding areas, whilst still providing a protective barrier from the elements (Hartley, 2017). The glass also allows for a large amount of natural lighting to pass into the property, further enhancing the 'at one' feeling with nature, taking advantage of the shadows from the trees and other surrounding forestry. Finally, the steel and concrete used within the building are mainly for the structural integrity and less about the aesthetic as much as the previously mentioned materials. However, some of the window frames were manufactured with the steel as mentioned and all exposed steel was coated in 'Cherokee' red, a tone made up of red earthy hues (Frank Lloyd Wright's Masterpiece, Fallingwater, 2015).

Organic architecture is the philosophy of architecture in which human inhabitancy works in harmony with the natural world and its surrounding site (Kanchwala, 2020). One could argue this is the perfect description for falling water as the entire design of the structure is to make it look like it is growing out of the water fall, naturally occurring. As previously mentioned, the sandstone and general masonry work on the structure creates a perfect harmony and transition from surroundings to structure as it has that imperfection that mother nature seems to master so well. The building was also seen as an innovative piece of architecture at the time as it really pushed to boundaries with glass work. The glass on the

property demonstrated the engineering of the building and its cantilevered design, glass meets glass to form an invisible corner, which at the time of construction, was an extremely innovative step in architecture (Peg, 2019). The use of the glass cantilevers allowed for the absence of standard vertical window supports, again taking pioneering steps into modern architecture.

Overall, it can be said that Wright achieved sheer architectural greatness with falling water. Starting with the integration of the structure to the natural surroundings, really creating a feeling of natural occurrence, Wright makes the observer feel like they are witnessing something special. The intelligent choice of resources used in the construction further adds to the organic feel of the building as they seemed to be sourced locally and show an uncanny resemblance when compared to the surrounding materials. Also, Wright managed to develop the interior of the building to demonstrate that one can create the feeling of free flowing, unrestricted existence while still fulfilling the criteria of a living space for a family. Wright arguably paved the way for modern architecture to continue the work in organic themed structures and exploration of uses of glass that we still see today.

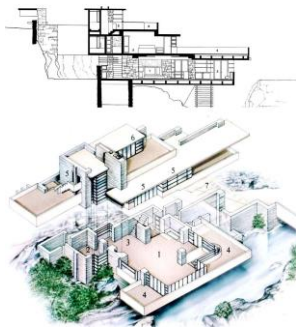


Image 1a



Image 1b

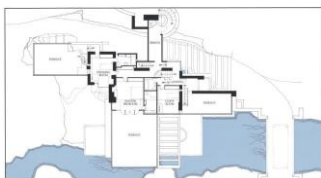


Image 1c

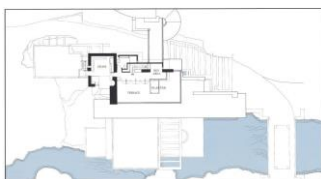


Image 1d

(AD Classics: Fallingwater House / Frank Lloyd Wright, 2015)

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