

Manipulating People: **How Architecture Affects the Senses**

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ARC 103 HUMANITIES 1

Architecture, in my view, should be an experience for the senses. It is, after all, our senses that dictate our wellbeing; whether we are comfortable, cold, relaxed or timid. It is also likely that some spaces are more likely to appeal to certain senses than others, perhaps due to functionality or context. Winston Churchill was once quoted saying; *'We shape our buildings; thereafter they shape us'*¹ and I personally find that the fundamental factor behind architecture. We have all experienced the different ways buildings can affect us; the demand for respect and quietness in a church, the stress and strain when rushing through a station to the platform that always seems furthest away. Yet how can spaces enclosed by slightly different walls really provoke such varied reactions? It is due to how we experience things. The dictionary definition of experience can be closely linked to feelings and emotions, which in turn are manipulated by and strongly linked to senses. It is our senses that allow us to feel the coolness of the breeze within the space, or hear the hustle and bustle, which impacts our psychological state and encourages us to behave in a certain way within the space.



Figure 1, Dramatics of lighting, Pantheon, Rome.

Light is a crucial component that should always be considered when designing a building. In terms of an experience for the senses, light levels can potentially be one of the first things you notice about a space, it can be the deciding factor whether to enter a certain space or not. There are various ways in which light can be used from cascading down a staircase creating drama across multiple levels

to simply giving a warming glow to welcome you into the space. Nowhere is better when looking at how light can be used dramatically than the Pantheon [fig.1] in Rome (126 AD). Louis Kahn once said,

*“We were born of light. The seasons are felt through light. We only know the world as it is evoked by light, and from this comes the thought that material is spent light. To me, natural light is the only light, because it has mood – it provides a ground of common agreement for man – it puts us in touch with the eternal. Natural light is the only light that makes architecture.”*²

¹ Churchill, Winston, House of Commons Speech, October 28th 1944, thinkexist.com

² Kahn, Lewis, Ronner, Heinz and Jhaveri, Sharad, eds. Louis I. Kahn: complete work 1935-74. Birkhäuser, Basel 1987, from Blundell Jones, Peter, *Modern Architecture Through Case Studies*, Architectural Press 2002, Chapter 16, p 229 in PowerPoint Presentation

With which, I agree to an extent. Natural light pours into the space with such purity that cannot be recreated by 'artificial lighting'. However, I believe that artificial lighting can be used in innovative ways as well. I don't believe that turning the lights on need not to be just about making a room brighter, why should it? I feel that turning the lights on should be about transforming the space. This idea of creating lighting that almost provokes interaction was something present in [fig.2] Louis Kahn's Salk Institute (1963) whereby he created light fittings, which were designed to easily slide along the rails of the roof. From this idea, one would presume that light positioning could create a variety of transformations within the space.



Figure 2, transforming a space through lighting, Salk Institute.

The **acoustics** of a space are crucial. We depend on what we hear so much, something you notice when crossing a road, for example. Each sound can provoke a reaction, mentally and physically, and, consequently, must be considered when shaping a space. All in all, it is a major factor in how the space feels. A space where there could be no sound inside, like a vacuum, must feel very disorientating and still. It's the acoustic qualities that add to the dynamics within a space and, in turn, add to the character and give the space its pulse, like a human heartbeat. I think Peter Zumthor made a fundamental point; *Interiors are like large instruments, collecting sound, amplifying it and transmitting it elsewhere.*³ before going on to say that we associate sounds with certain rooms. I think the most powerful point that this simile gets across is the fact each instrument can be very different and it's the same with spaces. Obviously a violin is very different to a trumpet, but put two violins together and the differences between them are, in my opinion, very similar to how spatial acoustics work. They are bound to have a slightly different

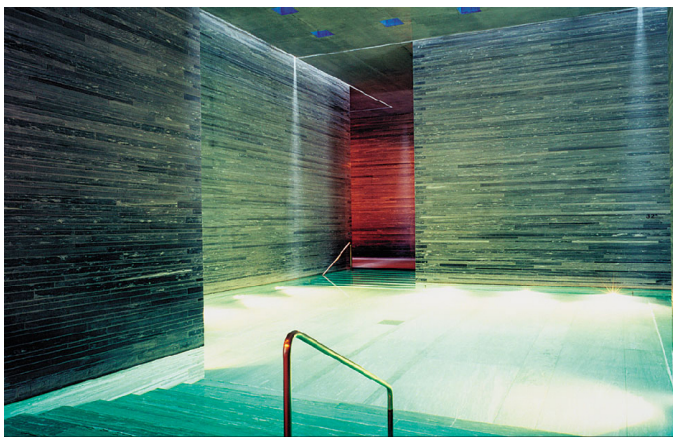


Figure 3, acoustics and relaxation, Thermal Baths.

tone, sustain or simply volume. It's the subtle differences like those that can be very powerful and influential within a space, giving the space life. These acoustic considerations are something that I feel Zumthor really employed in the design process of The Thermal Baths in Vals [fig.3], Switzerland (1996). Using materials similar to the

³ Zumthor, Peter, *Atmospheres*, Birkhäuser Verlag AG, 2006, p.29

surroundings and considering the effect the water can have, really gives a sense of relaxation, which I feel the acoustics will be a large part of.



Figure 4, Use of linear design

Although architecture is so much more than mere **aesthetics**, it is an important factor. It can mask the interior provoking curiosity, or could be much more transparent. Fundamentally, in a similar way to light, the aesthetics of a building should be about reaching out to the sense of sight. People feel mentally obliged to shy away from judging a book by its cover, however, if the building doesn't present a good first

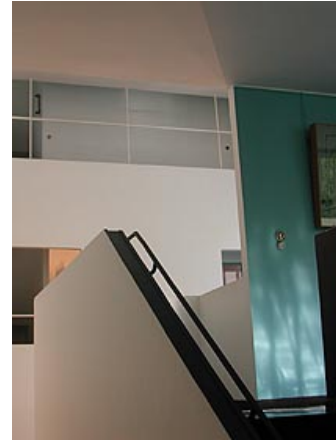


Figure 5, Prominence of lines



Figure 6, an Aesthetic Journey

impression, the likelihood is that the overall opinion of the viewer would be tainted. Having said this, getting the aesthetics right is not one simple formula, but must respond to certain elements, maybe

context, function or legacy. In doing so, certain aspects may be considered, such as dramatic effects or a sequential journey through a space. Take Le Corbusier's Villa La Roche (1925), for example. The aesthetics inside this building are so much more than mere looking pretty. The use of selective colour is very much in keeping with the

avant-garde art movement, designed to be quite experimental. Yet there is so much more

to it than just the use of colour. The way, in which lines [fig.4] are employed to draw you through the space, certain lines being more prominent [fig.5] than others, it creates an aesthetic journey [fig.6], feeding back to your mind and provoking the curiosity and desire to explore the space. It could be seen as too geometric as an interior, but, I feel that in this instance, the lack of too much colour, too many lines and shapes works well to keep the impression from being too cluttered which could have left the viewer feeling bombarded visually. This, along with the way in which

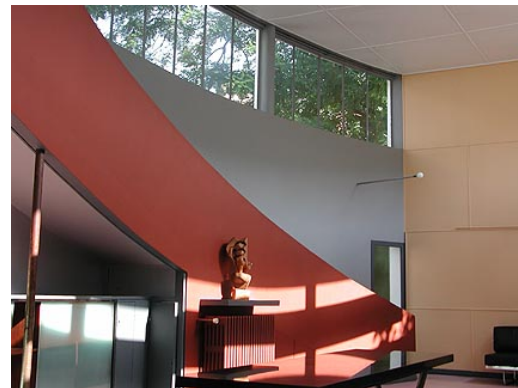


Figure 7, lighting contributing to aesthetics.

natural light seeps through the windows [fig.7], really enforces the dramatic effect that encourages the interest and makes the journey for the eyes so pleasant.

Although many things in architecture evolve and incorporate or reflect the zeitgeist, there are some things, which should always be in architecture, namely the **Legacy**. The dictionary definition of legacy is strongly linked to the passage of time. Although, this is not necessarily linked to the senses, it is certainly linked to the experience. Let's face it; there are certain landmark historic events that must have been amazing to experience, yet why today is there so little that gets people motivated? If architecture became more about the story it leaves behind, perhaps

connected to its birth and construction, or addressing the historical context of its situation, or even, dare I say, pushes the boundaries and tries to spark the revolution of new architecture, then we would be left with a lot of pretentious buildings. Yet, is it pretentious? Or are we striving to advance [fig.8]? The legacy of the space is something that gets experienced once but then makes history. It is never forgotten. It



Figure 8, Constructing the future?

becomes a monument of its own success. One could argue that you can never prepare for that, and that if you did there would be a lot of failed attempts. Well maybe, but that does not mean that we shouldn't try. Perhaps we'd begin to create a style or movement,

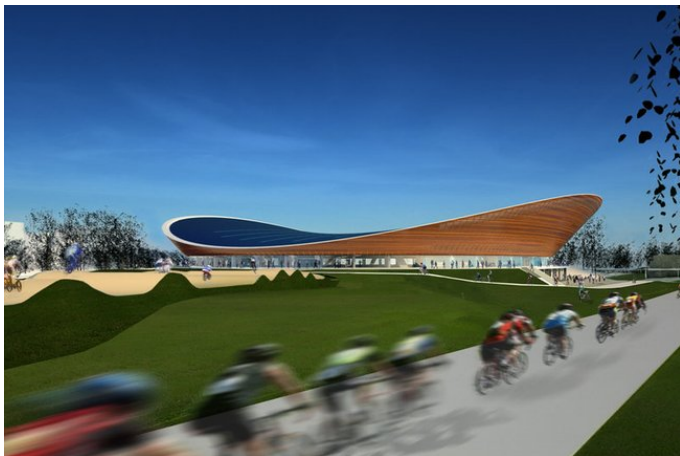


Figure 9, Start of the stories?

[fig.9]. Perhaps this example is a very literal example, but I think it could be potentially the beginning of the demand for more considering into the legacies left by buildings of the future within Britain.

but that defeats the object. The building that leaves the most profound legacy will go one step further; it'll be more advanced than its surroundings. The Olympics come to London this year and I am most satisfied that the legacy of the project was one of the main design criteria. If successful this summer, the Velodrome (2011, Hopkins Architects) will be remembered forever and, in my opinion, the memory, the story and therefore the legacy left would be priceless

The **Function** of a space can influence the aesthetics, choice of materials and legacy. Needless to say, it's a very important point, or moreover, it could be said to be one of its responsibilities. Why design something as a piece of architecture if it is not functional? It may as well be a sculpture. Although this doesn't directly affect the senses, it can make the experience within the space a lot easier benefitting the senses. Perhaps, in my opinion, one of the largest misconceptions in architecture is the fact that people consider function and believe that making



Figure 10, Making function Aesthetic.



Figure 11, Pompidou Centre, combining function and colour to revolutionise how we perceive the practicalities of buildings

a space functional and practical means it will not be beautiful. As has been said before, beauty is in the eye of the beholder, but even that doesn't really address this issue. Why can't function be stylish [fig.10]? I believe that over the past few years, design has really begun to address this issue, from kettles to cars. Yet in buildings the necessary functional components are often hidden. I personally really like the concept behind the Beaubourg Pompidou Centre [fig.11] in Paris by Piano and Rogers (1977). When I experienced this building, admittedly it wasn't a perfect

experience for the senses, not by a long way; however, I felt that the building as a concept was fascinating.

In a similar way to a building's function, I believe that how a building responds to its



Figure 12, Integration into landscape.

it really feels like it is connected to the waterfall on which it is situated. Although initially a view of the waterfall was wanted, the sound of the waterfalls compensates and really adds to the idea that a building could respond to the landscape by being designed to be almost part of it, as well as the fact there is more to experiencing than merely seeing. Another way to respond to local context is by doing the opposite. The Dutch Pavilion (2000) by MVRDV looks at the fact that a building could be situated in a main city, yet how do we utilise the upward expansion of city buildings to include greenery and parkland areas [Fig.13]. Both of these responses to the context of the building are perfectly valid and, in my opinion, should be commended as a result.

local environment and context is not necessarily a fundamental point, but a responsibility. In terms of how it responds to its context, there isn't one method; it depends entirely on its surroundings. Perhaps it may integrate into its surroundings, or maybe it stands out but uses local materials, or is influenced by the history of the site. In a sense, how a building responds to its context could be part of it being a legacy, however, where a legacy is about a long term memory, the response to local environment and context can be relatively short term. One particular example of good integration into the local surroundings [Fig.12] in terms of one way that a building could respond, is Falling Water by Frank Lloyd Wright (1937).

With its overhangs,



Figure 13, Opposing the current surroundings.

Sustainability, of recent has become the buzzword in architecture. But what actually is it? The dictionary defines sustainability as not using up natural resources. However, sustainability means many different things to different people. I do believe that being considerate when designing to not use resources that we know are in rapid depletion is

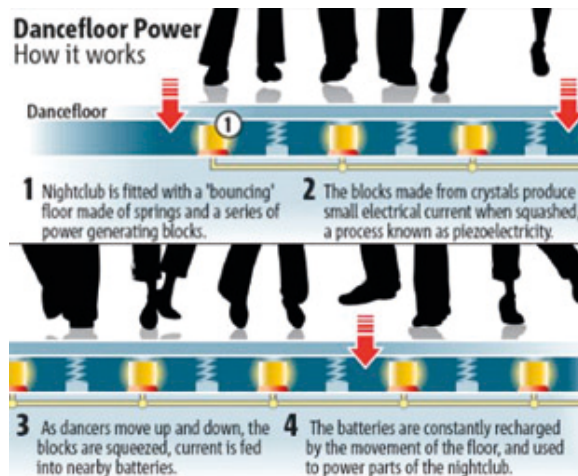


Figure 14, Innovation towards sustainability.

I also think that creating buildings that have less of an impact on the environment from a global warming perspective is important too. So how can we do this? We can reduce energy consumption by installing renewables such as solar panels or wind turbines but can we be more innovative than that? It is certainly one of the ways in which I would like to investigate during my time here. The Surya nightclub (2008) in London uses an innovative step towards sustainability by harnessing the energy from people dancing [fig.14]. I think concepts like this should be encouraged; after all, its ideas like this that begin to

build legacies. But it isn't all about energy. I think the use of nature, as a material is a very good way in keeping the carbon emission of the construction down as well as creating some fantastic aesthetics. As Mies van der Rohe said;

*"Nature should also live its own life. We should not destroy it with the colours of our houses and interiors, but we should try to bring nature, houses and human beings together in a higher unity. When you see nature through the glass walls of the Farnsworth House, it gets a deeper meaning than outside. More is asked from nature, because it becomes a part of the larger whole."*⁴

Obviously, the use of natural materials provides an element of unpredictability, which I think is appealing to explore with touch. Materials can certainly create interesting sensual effects and although here I am primarily looking at natural materials in the context of environmental factors and sustainability, it must be acknowledged that all materials can impact a space in terms of a sensual experience [fig.15].



Figure 15, Acknowledging the Surrounding Environment.

⁴ van der Rohe, Mies, Mies van der Rohe PowerPoint 2011, originally 1959.

In conclusion, the future of architecture will always be about the people, not the building necessarily. It is the people who use, work in, look at and experience the space. If architecture is to be successful, it must consider that and therefore must appeal to the senses. It is this, in my opinion, fundamental fact about architecture that I wish to really carry, develop and explore throughout my journey through the school. In times such as these with the strain on resources and the potential problems of global warming looming, architects should respond by using more sustainable materials in a playful manner. Furthermore, the responsibilities of architecture should not be seen restrictions but as the means of encouragement to redesign, strive forward and rethink the way in which good design works. Yes it should look good, it must still be appealing to sight and the other senses, but it must be practical and be able to hold its own for years to come. We shouldn't just see a building as being good now, or in 10 years, but in 100 years it must still respond and be something that is fundamental to design in every sense.

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