

History and Theory 2 Exam - M5X01981

(Q1). An architect working on historic buildings face difficult philosophical choices. ~~Discuss~~ Discuss how you would approach such a challenge given these philosophical choices? (25 marks).

For the purpose of this answer, a Grade I Listed building is The Tabernacle Chapel, Morriston, Swansea will be used as an example to explore restoration, renovation or refurbishment.

Within architecture, the terms restoration, renovation and refurbishment are often confused and used interchangeably. However, each have a slightly different meaning and uses when discussing historical buildings.

Firstly, restoration of historical buildings means returning them to their former state, e.g. the use of exact materials. Restoration aims to achieve a high level of authenticity by replicating materials and techniques. Modern additions to the building e.g. utilities and alarm systems are hidden and concealed, this is to ensure the historical character of the building is not lost or taken away.

Secondly, renovation is the improving or modernising of old, damaged and defective buildings. There are two classes, these are cosmetic e.g. replacing flooring, fixtures, lighting and structural e.g. the addition of extensions, loft conversions and the redesign of floor plans.

Thirdly, refurbishment, the process of

improving a building by cleaning, decorating, and re-painting, this may also include retrofitting, eg. adding new materials and technologies that ~~was~~ were not originally used. Refurbishment is similar to renovation, however, also includes the addition of elements that improve energy efficiency, sustainability and access to historical buildings.

When looking at historical buildings, particularly Grade I listed buildings, the most common used form of repair is restoration. This ensures the building is kept as original as possible, however, all buildings are unique and ~~this~~ sometimes does not suit all historical buildings. Grade I listed buildings are buildings which are considered to be of exceptional interest, therefore specialist rules apply when working on them. Many historical buildings face issues that are becoming difficult to maintain and resolve. They often do not comply with new building regulations, therefore need updating, this can be done through a combination of restoration, renovation and refurbishment. As every building is unique it is difficult to pick just one and the best option is usually to combine all three. This can be difficult in listed buildings such as the Tabernacle Chapel as altering the building is not usually permitted and can be difficult to do with restrictions. However, the usability of the building and preservation of its historical features need to be weighed up.

The Tabernacle faces many issues, for

example, the large heating costs due to lack of insulation on the ground floor and the roof. Other issues include the lack of income, limited disabled access and difficult maintenance. However, with the use of all three; restoration, renovation and refurbishment to the chapel, these issues can be minimised or resolved. Proposed interventions to secure the Timberado's long-term future and increase the building's life-cycle are:

Firstly, an extension to the ground floor to include a cafe to increase income, which could help with heating and maintenance costs. The proposed materials, such as glass and timber and the form of the building ensure it is a building of its time, but also enhances and compliments its surroundings. Extensions to a historical or listed building should be recognisable and distinguished from the earlier parts.

Secondly, the redesigning of the floor plans can provide a mix of spaces to attract new members. A proposed hub and library would attract visitors and increase footfall. This could be an additional source of income as visitors could make use of the facilities. In addition, office pods could be used inside the building ~~and~~ which could be rented out by individuals or groups. These interior spaces can be beneficial to a historical, Grade I listed building as no alterations are needed to the existing fabric.

Thirdly, an addition of a lift is proposed to

allow disabled access to the first and second floors. This would be in compliance with current building regulations, however this lift would be hidden inside the building and not placed on the exterior as this would detract from the historical characteristics of the building.

Finally, as in most historical buildings, the issue of insulation and heating costs would be addressed with the addition of roof insulation. The best insulation for historical buildings is natural insulation as it is more breathable. Whereas modern ~~insulations~~ insulations can trap moisture. This addition can greatly improve energy efficiency without altering the appearance of the building.

- (Q3) Discuss the origins and characteristics of 'organic architecture'? (10 marks).
Is the term 'organic architecture' relevant today? (15 marks).

The word organic can be defined as 'being or coming from living plants and animals' or 'happening or developing over time'. However, in architectural terms organic can be characterised in many ways, for example the use of natural forms and shapes which can influence the design of the building. In addition, organic architecture can be viewed as a building which uses natural materials, such as timber.

Also, organic architecture promotes a connection and harmony between human life and the natural world, whereby the building would be seen to rise from the site or ground rather than placed on top.

Some people believe the definition of organic architecture is originating from plants or animals and buildings can only be organic if they are constructed from 'organic' and natural materials. However, buildings can be organic even when constructed from inorganic materials such as concrete. For example, Sculpture House, Belgium is termed 'organic' for its form and ~~shape~~ shape, the building appears natural as it is ~~formed~~ covered in moss but is constructed from concrete.

Many architects take inspiration from natural forms and apply this to their architecture. Furthermore, organic architecture imitates nature and can inform how we construct buildings. Architects such as Ruskin and Viollet-le-Duc were inspired by natural shapes and processes. Examples can be seen in their architecture, where they were influenced by trees, shells, flowers and leaves.

Organic architecture has several interpretations i.e. materials, form or interacting with nature. Depending on the definition of organic architecture, the characteristics and/or the person's ~~or~~ understanding of it, there are many different opinions on what really an organic building is.

In a modern context the term organic

architecture is relevant with the introduction of new digital technologies, creating organic forms which are becoming easier to design and construct, such as curved walls and circular shapes, particularly on a larger scale. For example, The Guggenheim Museum, New York, 1959, by Frank Lloyd Wright, is organic in shape and the cantilevered design was inspired by the shape of a tree. However, some people believe that these buildings are not organic as they have been designed by digital technology and many are made from concrete which is inorganic. Organic architecture has changed in definition and use, traditionally organic architecture related to the use of natural materials and human reliance ~~of~~ on them, for example natural materials were used in primitive huts and caves. As seen in Skara Brae and Stonehenge which are constructed from natural materials and carved by hand.

As new technologies developed people sought comfort, protection, and energy efficiency which some believe was the start of the more commonly known use of the word ~~a~~ organic architecture. This is where buildings are integrated into the natural environment and there is harmony between architecture and its surroundings. Falling Water, 1935, by Frank Lloyd Wright is an example of architecture working in harmony with nature. It has a strong connection with ~~the~~ its surroundings and brings the 'outside in', such as

the building having strong connections with the waterfall. Furthermore, West Point House, Dover, is embedded into the site and appears to rise from the ground. However, Gropius House, Massachusetts, is inorganic ~~in~~ in shape but sensitive to its location and organic as it rises from the ground as if it has grown ~~in~~ within its surroundings.

In my opinion, organic architecture is relevant as it can be used to describe the connection between the building and the site, as well as its form and shape. However, there is less of a focus on organic materials being used in modern definitions.

(Q4) Is ornament and embellishment architecturally important for a bystander, to understand the language of a building? (25 marks).

The definition of ornament is an object that is beautiful rather than useful, however, in architectural terms ornament and embellishment can be used in many forms. The modern use of ~~the~~ ornament can be aesthetic eg. enhancing the appearance of a facade, but also indicate symbolism, economic status, culture and religion. Furthermore, ornament can inform the bystander of the building's function and societies that constructed and designed them. Ornament has a significant role in identifying and defining a place, for example, can guide

the user around a building, such as, indicating entrances and showing the direction of travel around the building.

To a bystander ornament and embellishment can reveal a lot about a building, for example, ornament traditionally indicated a client or owner's wealth. Ornament was viewed as a luxury, as more time and labour was needed. Furthermore, ornament showed social standing and status within a community. For example, Palazzo Medici, Italy, 1444, was highly ornamented and owned by one of the richest families in Europe at the time.

Both religious and cultural buildings show a good example of the use of ornament to portray the language of ~~its~~ its architecture. Ornament can be used to represent the use of a building e.g. a cross on top of a church to signify it is a religious building. Furthermore, ornament can be used to portray stories and beliefs of a religion and be used to distinguish between different religions. Such as stained-glass windows in churches and cathedrals can be used to teach people religious beliefs and practices, for example Bourges Cathedral, France, 1200. Moreover, ornament can be used to signify a society's culture and cultural differences. For example, The Egyptians used ornament on a building's facade that could only be understood by people who spoke their language. This is important to a bystander to understand the history of the building or ruin they are

Studying the use of architectural ornament can ~~be~~ bring together communities as a building can portray their beliefs, similar to the use of ornament in a religious context. In addition, the use of ornament and embellishment promotes a cities diversity and culture to visitors and bystanders, for example, 40 Bond Apartment building by Herzog and De Meuron in New York. The fence at ground level is ornamented and portrays the local graffiti culture of the area.

In conclusion, the use of modern ornament and embellishment have many functions, it has now become more functional ~~rather~~ rather than just used for aesthetic purposes. Ornament can tell the story of a building and is important to a bystander eg helps distinguish place, symbolises religious beliefs, portrays cultures and can indicate the history of a building. Therefore, if architecture is less ornamented it can separate the public from ~~a~~ a building, losing the connection between humans and architecture.

(Q5) Alvar Aalto and Jørn Utzon demonstrate
(a) Critical regionalism in their work (15 marks).

Critical Regionalism can be described as design that responds and is sensitive to its site, considering the topography, climate, and geography of an area. Critical Regionalism is said to give a sense of place, combining both global architecture and technological developments within the local site.

Kenneth Frampton discussed Critical Regionalism in an essay in 1987, he suggested ~~that~~ both Utzon and Aalto demonstrated the resistance of late modern and post-modern architecture. Alvar Aalto was a Finnish architect who demonstrated critical regionalism in his architecture and design approach. Jørn Utzon was a Danish architect, similar to Aalto his designs were focused on site and context, considering nature, climate, materials, culture and social values. However, Utzon travelled more than Aalto, therefore his designs were more influenced by global cultures and his experiences with these cultures.

Utzon and ~~Aalto~~ Aalto's architecture demonstrated the consideration of physical characteristics and cultural characteristics of the site. Aalto and Utzon's architecture have many similarities, one of ~~the~~ the main being their focus on site, integrating their buildings into the local context and

'anchoring' them to the conditions of the site. Both Aalto and Utzon created architecture in place and time, not style and place.

In the early 1930's Aalto was influenced by modernist architecture, however a few of his ~~earliest~~ earlier buildings did show regional specific design and context to site. By the end of the 1930's Aalto became the first and most influential architect of the Nordic modern movement, which had a strong focus on materiality and context. Aalto also used materials to reflect surroundings, for example he used raw, unornamented materials, such as brick, copper, glass and wood to express their organic qualities and fit into the surrounding site. Aalto and Utzon similarly use light, materials and form to create a building specific to site and create a link between the building and context, but is not driven by international styles.

To conclude many projects by Aalto and Utzon provide good examples of critical regionalism. Both are inspired by cultures and the integration of the building into the landscape. Aalto has influenced Nordic modern architecture, however, Utzon had more of an international influence.

(Q5) In your opinion, give examples of buildings that best display their work in this regard? (10 marks).

In my opinion, there are several buildings ~~that~~ by Aalto and Utzon ~~the~~ which demonstrate critical regionalism. These examples highlight the points raised previously eg. site context, use of form and shape, and integration of the building into the landscape.

Aalto's later work responded sensitively to the surroundings, one example of this is ~~Säynätsalo~~ Säynätsalo Town Hall, Jyväskylä, Finland, 1952. A mix of traditional vernacular and abstracted geometric forms of the International style. The plan represents the local town square and the courtyard symbolises the centre of the community. Similar to Utzon's design approach, Aalto incorporated an elevated courtyard into the town hall. This 'floated' within the surroundings and takes visitors upwards into the entrance of the building. The steps leading to the entrance are carved into the grass to keep the feeling of walking on the natural ground as you enter the building. Furthermore, the natural landscape is reflected in the abstract roof shapes, showing the uneven levels of the surrounding trees. ~~The use of a natural~~

The use of a natural colour palette to fit the surrounding site and integrate the building is used by Aalto

in Säynätsalo town hall and Villa Mairea, Noormarkku, Finland, 1938, which have a similar colour palette to reflect their surroundings and regional location. Both buildings draw on form and shapes of the surrounding topography and the materials and textures used reflect the landscape.

Utzon was inspired by Chinese and Japanese temples and Nordic Stone churches, for example Bagsvaerd church, Denmark, 1973. Utzon also took inspiration from natural forms, this can be seen in the interior of Bagsvaerd church, which takes the shape of clouds hovering above the horizon. The interior of the church, described as a sanctuary, is contrasting to the exterior, this is said to add to the sacred experience of it as it symbolises the entering into another place. Utzon uses light and form in a similar way in Sydney Opera House, Australia, completed in 1973. The form and shape are said to represent clouds above the sea or sailboats. The platform which leads to the entrance of the opera house signifies rising above everyday life, similarly used in Alttos Säynätsalo Town Hall.

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