

## **Modernism and Postmodernism - Critically assess the impact that Modernism had on social housing provision**

### Introduction

Architecture is a production of art and science, design and technology, shaped by external factors such as societal expectation, social pressures and economics as well as political ideology and power (Colquhoun 2002). It is a means of communicating the important issues of each generation, where designers interpret the needs of society through the physical manifestation of the built environment. In short, architecture provides a snapshot of the social, economic and political trends of each epoch (Moffett et al., 2003). It follows that there have been many different schools of architectural theory and design, ranging from the Classical style of Ancient Rome to the romanticism of the Baroque, the purity of the Gothic to the rationality of the Modernist and the irrationality of the Post-modernist styles. Each new style is a reaction to the previous generation, an attempt by each generation of designers to capture, communicate and contribute to the social, economic and political pressures of the period (Crilly et al., 2008; Shryock et al., 2011).

This essay critically assesses the impact that Modernism had on the provision of social housing. It continues with a review of the nature of Modernism and its leading exponents in terms of architectural design, planning and the built environment. This is followed by a review of the manner in which the key concepts of Modernism influenced the provision of social housing in developed nations. The essay also considers the role of Post-modernism and Post-structuralism in the legacy of Modernism.

### Nature of Modernism

Benton and Craib (2001) point out that the traditional view of scientific investigation was that moral, social and political influences should be excluded to ensure objectivity. Science was deemed a way of providing objective knowledge for the world rather than relying on superstition and religion. From the late 1840s onwards this view sought to advance human freedom and progress self-determination by pushing against the limits imposed by nature and social/class oppression through the application of scientific knowledge in all aspects of society from agriculture to industrial technology. In other words there was a cohort, the Modernists, who believed that science was the way to progress the human condition, through mass production, industrialisation and

harnessing the forces of nature through technology to create wealth for all of society (Benton and Craib 2001).

It is argued that from this rationalism emerged the Modernist movement in the arts, the sciences and architecture (Giddens 1990). The Modernist ideal was one of positivism where reality is independent of social mechanisms. It was also technocentric and rational, believing in linear progress and absolute truths and rational planning of social orders, as well as the standardisation of knowledge and production (Harvey 1989). The Modernist ideology evolved during a period of change in society, and whilst history indicates that society is constantly evolving, Giddens (1990) argues that in the 1900s it was the pace of change which fuelled Modernism, as technology pervaded all aspects of existence. This led to social transformation, from a largely agrarian society to an increasingly industrialised one, fuelling changes in politics with the emergence of the nation-state, increasing dependence on the commodification of products and labour for wages. Given that architecture is influenced by socio-political issues, it is unsurprising that these changes led to the emergence of the Modernist school of architecture (Colquhoun 2002).

According to Cohen (2004), Le Corbusier was a central figure in the emerging Modernist movement of the early 1900s. This emergence was a reaction in part to fascination with the industrial age and evolving technology and in part a view which held that such technology could be used to address the need for social change in a disintegrating society. The Modernist style could be described as reductionist, seeking to rationalise the built environment to provide habitable, functional space for all sections of society. Le Corbusier (1927, p.1) suggests that in the 1920s architecture was in an “unhappy state of retrogression”, whereas engineers who relied on the laws of economy and mathematics could achieve harmony in design. Le Corbusier suggested that architects could enhance the quality and experience of space by adhering to the law of rational design, focusing on form, scale and structure to create functional, meaningful space at a time when there was a dire need to halt the social fragmentation of society. Le Corbusier argued that building, mass-production of housing using innovative materials, and techniques with a new form of design could resolve the social problems of the time. In his view it was “architecture or revolution” (Le Corbusier 1927, p.8).

It is submitted that this quest for an ordered existence in the design of a house, extended to town/city planning, where Le Corbusier (1929) suggested that many cities had evolved in a haphazard manner which did not reflect the needs of society. In this

view people require “straight lines” to get from one place to another, whereas (at that time) cities were designed without thought on the required function of the city (Le Corbusier 1929, p.10).

### Impact and Legacy of Modernist ideas on social housing

Wassenberg (2013) points out that the principles of Modernism were applied to mass housing issues in 1930s, with both architects and planners taking the view that it was possible to apply the Modernist principles of form and function to achieve an egalitarian society through the provision of housing for the working classes.



Figure 1. Le Corbusier's Radiant City (Wassenberg 2013, p.46).

This led to the *Congres Internationaux d'Architecture Modernes (CIAM)* presenting international conferences on design of housing and urban planning which had a major impact on the design and construction of social housing in several countries including the UK and the USA. It included the rational design of space and the application of technology and mass production, leading to modular forms of mass social housing. This can be exemplified by the work of Le Corbusier's Radiant City plan, shown in Figure 1, which indicated that free-standing, high-rise residential blocks were the solution to the housing crisis and the social unrest that was evident in major cities. Each block is designed as rational space with repeated modular shapes and forms throughout the building. This was followed by the concept of the functionalist city,

which provided the perfect setting for the construction of these buildings and the achievement of an egalitarian society (Wassenberg 2013). Le Corbusier (1929) argued that a vertical city would provide access to light and air for the occupants and free ground level space for cars and transport, trees and public space.

The design of the housing estates was focused on the Modernist concept of the functional unit, which could be extended to encompass the neighbourhood unit consisting of all houses, essential services such as schools and public centres, all of which were planned as ordered space in contrast to what was viewed as the chaos and social demise of the pre-war years (Wassenberg 2013). The intention was to address social chaos with the provision of ordered space, where functionality was clear from the exterior and the interior of the building and there was no need for superfluous ornamentation (Le Corbusier 1929).

Von Moos (2009) points out that Le Corbusier's design of the Unite d'Habitation is Le Corbusier's best-known work in social housing, shown in Figure 2.



Figure 2. Unite d'Habitation (Fearson 2014, p.1).

The Unite was designed as a prototype for the nation's reconstruction after two world wars. The design was functional and suited to mass production which it is argued is in keeping with the Modernist principles. Each unit comprises a simple, reinforced concrete cage, inserted into a structural frame as shown in Figure 2. The units are designed on a modular theme with 23 different sizes ranging from a single unit for an individual to a large unit for a family of 8 children. In addition every 3<sup>rd</sup> floor of the building was designed as an interior street (Von Moos 2009).

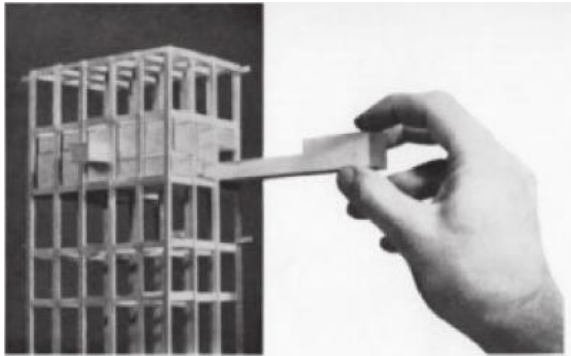


Figure 3. Model of Unite (Von Moos 2009, p.257, Figure 180).

Kroll (2010) maintains that each unit within the building conformed to Le Corbusier's ideas relating to function over the ornate, and proportionality. These design principles extended to the holistic design of the entire building as a neighbourhood within a single structure. Fearson (2014) argues that the building model copied by several countries. Another example is the Pruitt-Igoe public housing project in St Louis USA, which was constructed in 1954 and demolished as a failed project in 1976. The design was founded on the rationalist ideology of Le Corbusier and CAIM, and encompassed 33 eleven-storey towers providing housing for 15,000 occupants. The design was initially heralded as an architectural triumph; however the building quickly failed to meet the social needs of the occupants. Jencks (1978) makes the point that the demolition of this building heralded the death of modern architecture. Harvey (1989) agrees, intimating that there was a growing body of criticism of the Modernist style, particularly in the form of the Post-Modernist school (Harvey 1989).

### Role of Postmodernism and Post-Structuralism in the critique of Modernism

Lyotard (1984) points out that Modernism is linked to scientific reasoning, whereby science legitimatises the rules of its own game and then creates a meta-discourse around such rules. Derrida (1978) makes a similar claim, suggesting that rationalism is founded on the premise of certainties. The inference being that Modernism failed because there are no certainties in design, particularly design which is influenced or

which seeks to influence social issues. The suggestion is that Modernism seeks to set itself as a rational social philosophy, yet it is founded on its own rules which undermine the essence of its theoretical position with respect to the totality of the social mechanisms. The difficulty is that in adopting the Modernist ideology, designers and decision-makers try to manage social issues in terms of “input/output matrices”, applying logic on the premise that the “whole is determinable”, whilst also seeking to optimise the efficiency of the system (Lyotard 1984, p.xxiv). It is submitted that Post-modernism is the polar-opposite view of Modernism. As it is irrational rather than rational, it does not focus on the modular but embraces the fluidity of diversity. Post-modernism moves away from the linearity of Modernism on the premise that there is no universal condition, due to the diversity of humanity and society. In other words, the Post-modern ideal is focused on the heterogeneity of social mechanisms and the human condition (Lyotard 1984; Jencks 1987).

Harvey (1989) argues that the Post-modernism ideal emerged in the 1960s in the belief that the Modernist concept equated to rationalisation and mass production of space which was not consistent with the needs of the city, nor reflective of the individualism and irrationality of city dwellers. Harvey (1989, p.5) cites Raban who held the view that a city is a labyrinth, a honeycomb of human interaction and individualism that cannot be sustained by the rationality of the Modernist ideal. The emergence of Post-modernism was a reaction to the “monotony” of modernist vision of the world. Jencks (1987) shares this view, adding that Modernism failed because of the dogmatic way in which designers applied its principles and the fact that it failed to focus or deliver its social goals. Jencks (1987, p.17) offers the works of Mies van der Rohe as an example of these failures due to semantic confusion in the design of buildings, leading to a “factory in the classroom, the cathedral in the boiler house.” Haddad (2009) further notes that Jencks believed that Modernism had lost the fundamental connection between architecture, and the public, because the social objectives of the modern ideal had been hijacked by commercial entities. Jencks (2002) suggests unlike the Modernist ideology which favoured the use of uniformity in design and a single style, the Post-modernists argue that design should reflect the diversity of society, integrating different styles within a building or planning of an urban environment to achieve greater connectedness with built space. It is suggested that this is evident in several Post-modern social housing developments in London including 105-123 St Mark's Road shown in Figure 4 in Kensington, London where architects Jeremy and Fenella Dixon sought to reflect the diversity of London within the structural and aesthetic design of the properties.



Figure 4. 105-123 St Mark's Road, Kensington, London (Mairs 2018, p.1).

It is argued that there is a character to these properties that situates the buildings in a historical and cultural context (Mairs 2018) which is absent in the modern style.

Structuralism emerged in the 20th century, arguing that human activity including perception and thought are constructed - as such everything has meaning. This philosophy is found on four principles, namely that there is a structure to every system, and that structure determines the position of each element within the system. The relationship between the different elements is governed by structural laws and each structure is real. This theory originated in linguistics but was quickly adopted by architects on the premise and represents a complete contrast to the notion of Modernism in individual building design and urban planning (Mallgrave 2009).

It is argued that unlike Modernism which focused on the functional unit, Structuralism is centred on the notion of organic growth and integrated spaces. In other words, space is a system within which there are several connected elements. The elements within the system may change, but their relationship to and dependence on the whole is unwavering. In terms of design strategies this includes the use of numerical rhythms and sub-rhythms to understand and create useful space that holds meaning for the occupant/user. It also focuses on the design of urban space in terms of smaller units

to add value to the wider spatial unit. In keeping with its linguistic origins, Structuralism also places importance on the use of signs as a form of communication (Mallgrave 2009). Hsu (2014) points out that Structuralism was a reaction to the technocratic and social unresponsiveness of the Modernist style, essentially a chasm between the pragmatism of a new generation of architects and the idealisms of the ageing generation of Modernists. In short Structuralism sought to transform the space and time of the functionalist Modernist ideology with “place and occasion” (Hsu 2014, p.207).

It is suggested that Structuralism is a bottom-up form of design, focused on the needs of the community and the integration of space, a form of participatory design such as the work of Kroll, whereas Modernism is top-down whereby the designer creates space within which social needs are expected to be met (Hsu 2014).

## Conclusion

This essay explored the impact and influence of Modernism on social housing in developed countries. The study finds that architectural theory is a dynamic issue, evolving with the changing needs of society and influence by technology, economics and political will. This means that architectural design is fluid and successive generations of designers seek to build on previous generations, or as in the case of the Modernist seek to break away from tradition. It is found that Modernism championed by Le Corbusier was underpinned by the need for social change. The solution was founded on mathematical principles and the assumption that top-down design would resolve complex social issues by providing people with a good-quality home. This style sought to draw on the changing nature of society, using mass production and functional design principles to optimise the efficiency and functionality of space.

However, as evidenced by the criticisms of both the Postmodernists and Structuralism, the linearity and functionality of the Modernist ideals did not take account of the organic and non-linear nature of humanity. Both these schools of design focus on the diversity of the community and the urban environment, seeking to create integrated space that reflects the social and evolving needs of the city.

That said, it is concluded that there is a persistent legacy of the Modernist concept in building design and in urban planning. In addition it is submitted that the Modernist concept stimulated debate within the school of building design - as such it has



furthered and continues to further design evolution, ensuring dynamism in design which evolves with the changing needs of society.

Word count: 2691

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