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CHAPTER 1: THE CONCEPT OF MODERNITY

The objective of this chapter is to survey the literature available on the concept of modernity, its use in architectural studies as also in other human sciences with the object of setting forth parameters of my own investigations into the nature of modernity in the architecture of Chandigarh. At the onset, I must admit that it has been a long journey in attempting to formalise the three m’s that is Modern, Modernity, Modernisation and build an understanding of these terms. The terms modern, modernisation and modernity have been used in a variety of ways by different persons, in different contexts and at different times. In the beginning, therefore, it might be fruitful, in order to specify my own terms of the discourse, to make an effort to identify use of these concepts and its relation with the other uses of these terms. More so, because at the beginning, I thought the task was not so stupendous and often felt that I had arrived at a ‘definition’, but only woke up to the realisation, discovering a new dimension to these m’s that I had slowly and surely begun to be convinced that there was no single definition to the m’s.

In my research, I would henceforth address these “definitions” as loosely constructed ideas developed around more conclusive social, economic, and technological parameters that have influenced these ideas which concretised somewhere around the late nineteenth century and early twentieth century (though they appeared much earlier).

It is important and crucial to the statements that follow as to why these are loosely constructed ideas. Modern as mentioned by historian Cyril Black1 implies the Latin term ‘denoting the quality of the

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1 Black, Cyril E. (ed.), 1976. Comparative Modernisation: A Reader. Free Press; New York. (Historian Cyril Black has written that in ancient Latin, modern was ‘a term denoting the quality of a contemporary era’).
contemporary era’, whereas Raymond Unwin\(^2\) notes that the earliest meanings of the word ‘were nearer our contemporary, in the sense of something existing now, just now’. The prenineteenth century accorded a pejorative status to the term modern, while in the twentieth century modern became equivalent to improved, satisfactory or efficient.

In his history of Western Philosophy, Bertrand Russell\(^3\) talks of the modern age that rejects ecclesiastical authority and accepts scientific authority, which began with the Copernican Theory (1543 AD) and was strengthened by Kepler and Galileo (1700 AD). Then began the long fight between science and dogma and the traditionalists fought a long battle against new knowledge. The authority of science prevailed by its intrinsic appeal to reason. It pronounces only on the present time, what has been scientifically ascertained as a small island in an ocean of neoscience\(^4\).

John Galbraith one of the better-known Keynesian economists in post-war America ascertains in his book “Good Society”\(^5\) another dimension to “modern”, that it must address the problems of the masses by way of welfare reforms, be it price control, inflation or job opportunity, or mass housing. In the 1930’s as a post war development strategy the “Contract with America” between Franklin Roosevelt and America’s poor was a simple agreement - that every person in need would receive aid from the federal government. Such an unprecedented socialist approach forms the basis for the modern world. It is another matter that such aid would ultimately weaken the human society as it would slowly stop struggling because of the hidden commitment that finally the state would be its provider.

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2 Unwin, Raymond also notes that the earliest English meanings of the word modern ‘were nearer our contemporary, in the sense of something existing now, just now.’


Modernism has also revealed dual meanings—i) objectively it tried to remove distance, (the distance could be mental, social and aesthetic) with its stress on the present and experimentation and ii) subjectively it has brought about humanism and unhindered creativity as found in the nineteenth century. The freedom for experimentation brought forth an upsurge of fresh ideas, venturing into unexplored dimensions revealing new-sprung methods and meanings into the various domains of life. To think in a modern way, was a way of life --legitimate now -- a sanctioned norm. Modern therefore has many connotations and operative dimensions.

Modern is that which implies a radical shift from the past into a (better) future. In the generic sense it has the distinctiveness to distinguish it from the previous eras. It implies betterment, progress, a development of the society at large, and therefore addresses a new dimension—the commitment towards improving the conditions of the masses. To be modern was not a style, or a fad, or the way of the western world, or the antithesis of things that are oriental, or Asian or even Indian. It was a way of thinking that was ultimately driven by ideals based upon a strong desire to take charge of one's own destiny. One would no longer be taking things as they came in any sphere of life. It meant that each single query would have to be logically explained and reasoned rather than be accepted on a “as is where is” basis. Myth, dogma, and their synonyms had to be reasoned by rational, scientific enquiry and each individual was beginning to exercise his spirit of enquiry.

The positive and negative aspects of modernisation in the post-enlightenment period are to be judged in respect of the fulfillment of the basic needs of the common people — economic, political, cultural, medical etc. It is necessary to take into account the questions of economic inequality, employment opportunities, colonial or neo-
colonial exploitation, maintenance of balance with nature and so on. The massive development in the production of food and tools, the unbelievable progress in technology and science, the great breakthrough in the medical field, agro technology, mobility and communication networks, the extraordinary widening of the horizon of knowledge in innumerable spheres and so on are the fruits of the post enlightenment age - of modernisation. There is also a theory in support of modernisation which is somewhat high-sounding lofty view that when differences between national societies are narrowed off it will lead to "a point at which the various societies are so homogenised as to be capable of forming a world state".

Through the writings of Foucault, one discerns his main preoccupation with epistemology and history of modern sciences concentrating on the central point that all systems of thought stand in relation to power and creation of power structures. From the Marxists view modern economic thought arises along with the capitalist production, or modern political thought springs from the time of emergence of the bourgeois state. However, to Foucault there are no particular boundaries between ideology and science, or between true and false knowledge. His main concern is the relationship between the true claims of human sciences and the structures of power legitimising them. The question remains whether one can draw a distinction between the claim to truth and the claim to power in every case.

Foucault formulated his arguments along two axes: the epistemological claims and discursive formation of the various sciences, and a historical account of particular discourses as specific power or knowledge complexes. His main concern was to discover the real properties of what he called the western episteme, the basic system of

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6 Aditya Prakash, Vikram. October 7, 2003. The Tribune, Special Supplement; Chandigarh, India. "It Makes Us Think Again".
all European knowledge as they have been constituted since the age of reason from the period of Descartes and others, and were then stabilised in the modern age when various human sciences came into being. So, according to Foucault the modern world denied any objectivity of knowledge that was not an effect of power.

For the purpose of this research I would elaborate on the various usages of the terms modern, modernity, modernisation as concepts that relate to progress, and betterment of society, which is looking into the future shaped by power structures, sociological concerns, economic and technological overtones. I understand that there is a whole body of ideas today which problematises the term modern. Yet, given the proclivity of Le Corbusier and his times to use the idea of “modern” to problematise the existing ways of town-planning and architecture it behooves us to first look into the how and wherefore of Le Corbusier’s ideas before finding their limitations and adjustments to a different world context.

This thesis focuses on the way modernity as understood by the western world came into India especially with reference to architectural thought processes which had a profound influence on the way people lived, what constituted a modern and therefore good way of living (both physical and social good) and how modern living environments could enable people to become better individuals in a modern society. There exist numerous writings that express the idea on modernity based on prevailing conditions and served as a springboard to the onset of modernity which began in the western world and spread to the east through men, materials and thought processes.

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8 These references on post modernity are especially prevalent in architectural studies and in literature [... within the social sciences the idea of post modernism gained popularity during the 1990s but now is considerably on the retreat [...]. The writings of Cyril Black, Foucault, Anthony Giddens, Sigfried Gidron, Leonardo Benevelo, Reyner Banham, JM Richards and later Kenneth Frampton, Hasan Uddin Khan and others are significantly important.
Another significant contribution of modernism has been social responsibility especially in the case of developing countries, by way of setting up of welfare states. The modernists upheld and practised the ideal of using the new possibilities brought about by machine production as a means to uplift the masses out of squalid living conditions. Modernist movements such as the Neue Sachlichkeit\(^9\) in Germany explicitly expressed social intentions. Looking at the poor housing conditions evidenced by the informal settlements in the urban areas, such developing nations could do well only through nothing short of a genuine socialist intervention, to make a change for the better.

The spirit of Efficiency that permeated the modern movement contributed amply to the fulfillment of architectural needs in the developing countries. With a huge shelter gap on one end and resource strapped economies on the other, less was to be utilised to achieve more, while being mindful of locally appropriate solutions, and aspects of building production that could be economically regulated for increased efficiency. Another, perhaps important aspect of efficiency is the promotion of good health and well being through design. It is well known that modernist housing in Northern Europe has contributed substantially to industrial productivity. Modernism has also offered many a useful lesson to such aspects as ‘freedom with order, sustainability, utilising decentralised technologies. Charles Correa writes in his book about the emerging new landscape in the third world, which is a creation of the modern urban landscape through self

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\(^9\) Benevelo, Leonardo. 1999. History of Modern Architecture: The Modern Movement- Vol.II. MIT Press; Massachusetts p.494. [Neue Sachlichkeit, was a term borrowed from literary discussion and used to emphasise the relationship between the architectural movement and similar experiences in other fields. The new architecture, like the prevailing Brecht’s theatre aimed at ‘affecting people’s practical behaviour’, at ‘getting decisions’ rather than at ‘encouraging emotions’. The architects had an advantageous position over the writers; the latter had to modify earlier settings destined to entertainment, and hope to satisfy an audience which was finding an escape from the daily grind, the architecture involved men in every moment of the day and affected them just when they were thinking of their practical interests.

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help and indigenous technology\textsuperscript{10}. The example of such a vision is the Belapur Housing in New Mumbai which is a self help project in which the basic infrastructure (site and services) has been laid out by the municipality and the individual adds on as and when he has sufficient funds to build his dwelling in an incremental manner. By decentralising technologies, people's own inventive capacities and resources can be tapped thereby reducing the financial burden on the government, and the resulting environment can be made more humane and livable.

While all these technological and economic changes were setting in, ushering in a change called 'Modernity', another sociological wave was also prevalent-- to be accepted as part of modern day society pervaded the dilemma of coping with the pressures of being update--modern in tune with the rest of the people around you. In the 'scientific society, the degree to which scientific knowledge, and technique based upon that knowledge, affects its daily life, its economics, and its political organisation leads to its stark distinction from previous times. The social effects of science in premodern times were perceived upon by a few learned and interested men, but in more recent instances science began transforming the life of even ordinary masses with ever increasing velocity\textsuperscript{11}. Psychological change has affected our lives dramatically. Introduction of movies, cinemas, automobiles, telecommunications have shrunk our globe and everything seems coalesced in a 'rapidity of change'. The 1930s ushered in intense post war development touching almost all social spheres. The movement from rural to urban areas, coupled with the growth of new cities and enlargement of existing urban centres saw a mammoth of building activity for providing requisite physical infrastructure to meet the increasing demands of housing, industry, social and community needs. Functional, logical floor plans and simple


unornamented walls of glass and concrete were emphasised to break with the existing architectural tradition and to design simple, unadorned buildings that served the fundamental needs of their users. "Just as the ancients drew the inspiration for their arts from the world of nature...so we should draw ours from the mechanised environment we have created...” wrote Antonio Sant'Elia' in his Manifesto of Futurist Architecture (1914). Such thoughts began to gain popularity and offered hope for novel developments in almost all fields -- from music to movies, from architecture to literature, from industrialisation to philosophical discourse. Powerfully influential in this wave of modernity were the theories of Sigmund Freud, who argued that the mind had a basic and fundamental structure, and that subjective experience was based on the interplay of the parts of the mind. All subjective reality was based, according to Freud's ideas, on the play of basic drives and instincts, through which the outside world was perceived. This represented a break with the past, in that previously it was believed that external and absolute reality could impress itself on an individual.

13 The Modern Movement encouraged the idea of re-examination of every aspect of existence, from commerce to philosophy, with the goal of finding that which was "holding back" progress, and replacing it with new, and therefore better, ways of reaching the same end. In essence, the Modern Movement argued that the new realities of the 20th century were permanent and immanent, and that people should adapt to their world view to accept that what was new was also good and beautiful. The important contributors to this include Sigmund Freud for the theory of relativity, John Locke --English empiricist philosopher who believed that all knowledge is derived from sensory experience, English fiction writer-- John Conrad on easier to read narratives, sea stories, along with works of TS Eliot, James Joyce, Charles Dickens and others radically shifted the literary scene. Moving pictures and cinema gave the Modern Movement an art form that was uniquely its own creating a direct connection between the perceived need to extend the "progressive tradition" of the nineteenth century, even if it was in conflict with the established norms.
14 Sigmund Freud (1856-1939) was an Austrian physician from the psychoanalytic school of Psychology. He developed a theory of how the human mind is organised and operates internally, and a theory of how human behaviour, both conditions and results from this particular theoretical understanding. This led him to favor certain clinical techniques for attempting to help cure psychopathology. He theorised that an individual's personality is developed by his/her childhood experiences.
The factor of time also played a key role in the development of the modernist architecture. Since post war rebuilding also aimed to rehabilitate people who had lost both their homes and occupations in the war as one of its agenda, it had to be achieved in a specific time frame, rebuilding in the shortest possible time period. This led to the demand for setting standards and specifications of building components which could be assembled to reconstruct and develop the infrastructure for the postwar city. The agenda for the 1930’s city was a system of standardisation, free from the motifs and subjects of the premodern, liberating the city to the status of the ‘rational city’. The pressures of communication, transportation and more rapid scientific development began placing at premium the architectural styles which were less ornamental as well as cheaper to realise.

The physical reality that goods were freely available meant that different nations could benefit economically through them. Technology appeared in the popular conscious, as did fascination with the machine and its social impact, vividly portrayed in Fritz Lang’s brilliant dystopia film of 1926, Metropolis\textsuperscript{15}. Songs such as Internationale, which served a Russian agenda initially, came to symbolise the solidarity and links between people across the nations\textsuperscript{16}. The attitude was one of internationalism, followed by social beliefs in mass production that led to works that could be realised everywhere. The term internationalism in architecture was first used by Walter Gropius in 1925 in a volume titled ‘International Architektur\textsuperscript{17}, which he edited for the Bauhaus\textsuperscript{18}. It showed a wide range of current works and discussed the far-reaching ideas that were emerging in the day, characterising modern

\textsuperscript{16}Ibid
\textsuperscript{17}Gropius, Walter. 1981. International Architektur. Mainz, Florian Kugelerberg Verlag; Germany.
\textsuperscript{18}Ibid
architecture as being unbound by place or culture. ‘Standardisation’ of building components, whereby ‘mass produced’ dwellings were manufactured from standardised mass produced components such as joinery, hardware, floor and roof coverings and support systems, became the hallmark of the modern age.

Quoting Nikolaus Pevsner’s term ‘pioneers’ of the modern movement (that included Walter Gropius, Mies Vander Rohe, Herman Muthesius Ludwig Hilbersheimer, Peter Behrens, Le Corbusier, Bruno Taut and others from Germany and Europe) were attempting to find the ‘form which most simply and directly served the functional efficiency of the building’. That brings us to the questions: Why was there a sudden need for being modern? Why did the modern times need a Modern Architecture? What were the conditions prevailing in the postwar period i.e. 1930s and beyond, which called forth modern materials and methods of production for rapid rebuilding and new building activity that engulfed the western world and influenced the eastern continents?

First, the needs of this age were absolutely new and different belonging only to the present. For architecture to be a true symbol of its time, it must match its technology, and then they must grow together ..., be an expression of the other. Second, the needs of the modern age could only be satisfied by utilising modern building techniques and modern scientific inventions to the full. The aesthetic needs could be satisfied both, by being honest craftsmen using new materials and by taking special advantage of the opportunities these materials could offer for creating effects and qualities in time with our

19 Ibid
20 Hilbersheimer, Ludwig. The Berlin based architect was the key organiser of the Stuttgart exhibition which was to put forth an already active modern movement through simple, positive explanations, comprehensible to everyone, using mainly technical arguments and leaving aside formal justifications.
22 A break occurred during the mid 18th century when renaissance faltered leaving a vacuum into which flowed numerous ‘inauthentic’ adaptations and recombinations of past forms.
own times. The extensive and varied use of factory produced materials—glass, steel and reinforced concrete offered greater possibilities and experimentation in built form and spatial configurations than ever before. Modern architecture is more than just contemporary architecture as it differs from previous works and makes a clear difference between beauty and the practical aspect of their creation. Designers must relate their buildings more closely to the needs they have to serve and since they are concerned with the pursuit of beauty—-aesthetics is important. – It (modern architecture) is quite simply, like all good architecture, the Honest Product of Science and Art. It aims at once at relating methods of building as closely as possible to real needs. Third, the New Architecture does not pose problems of Style but problems of Construction. The premises of modern architecture are of various kinds and include within its ambit the utilitarian, material and sociological concerns, dominated by the executive will of the architect, and the aesthetic factor is no longer predominant, but like all other elements it plays its part within the whole and retains its value vis a vis this whole. Fourth is the ideal of Unanimity in the new architecture. Modern architecture has been the product of unvarying premises, (though local and national peculiarities do exist or reflect the personality of an individual designer), reiterating an ideal of unanimity that goes beyond all frontiers. Fifth, what has been most important of the new needs that modern architecture had to provide for is connected with the growth of cities. The programme Modern Architecture was struggling to fulfill was to plan cities and the buildings (within), keeping in view the needs of the people and also make use of all that modern science could allow us. The famous axiom “modern architecture is functionally the creation of fit environments for human activities, aesthetically, the creation of sculpture big enough to

walk about inside\textsuperscript{26}, became a challenge appreciated only now and never before. Modern Architecture is that which matched with modern technology and therefore had to be radically different from its historical precedents. Yet, however modern and technological our architecture may be, it still has to house and shelter a race of men who have grown only a few inches taller, since prehistory and only a little more intelligent, battling a force of gravity that is substantially the same as in the high plains of Tibet or in the depths of the Death Valley, drinking water that is still water whether it comes from a spring or a tap, and breathing air that is almost as consistent in composition the world over. And such architecture will be viewed and judged by eyes and brains that do not differ significantly from those that looked upon the Stonehenge and wondered if that kind of architecture was here to stay\textsuperscript{27}. The modern age was disciplined by the exigencies of functions and its forms were to be purged of the paraphernalia of historical reminiscence. Compared to the loosely packed small town, the modern city was a new conception. It originated when the growing population crowded new centres to serve new industries which resulted in such an increase in land values in the middle of cities and such a density of housing that traditional forms of housing were no longer practical. New building types that emerged included the block of flats, railway stations, garages, power station, etc. Sixth, the task of designing buildings was very difficult, in the modern times as needs were constantly changing and problems were without precedents. As J M Richards reiterates in his book “Modern Architecture”, the task of modern architecture was setting seriously about the task of making something good and coherent out of what science offers. Modern architecture is the architecture of people who are happily growing in number, and who understand that architecture is a social art related to

\textsuperscript{26}Burnham, Daniel year [Le Corbusier quoted in A Guide to Modern Architecture].

\textsuperscript{27}Richards JM.1940. An Introduction to Modern Architecture. Pelican / Penguin Books; Great Britain.

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the life of the people it serves, and not an academic exercise in applied ornament\textsuperscript{28}. Seventh, the developmental perspective was very important to the early modernists in architecture and town planning and how it may contribute to the modernisation of Society, especially when it concerns itself with the realisation of positive factors, such as contribution to health, access to daylight and other functional qualities\textsuperscript{29}. Eighth, the damage done during the war caused a serious pause in productive activities and posed problems of rebuilding. There had been accommodation shortages even prior to the war due to renewed growth of population, but its vastness now was such that only the State could tackle it, so that subsidised building became an important factor, and the laws and legislations connected with it were developed accordingly. The architect’s clientele changed too: fewer private commissions and more from the State and public bodies, lesser individual homes and greater apartments, housing and commercial districts proved the growing importance of Town Planning\textsuperscript{30}. Ninth, and finally, Bruno Taut\textsuperscript{31} had summarised the character of the Modern Movement in 1929 in that Utility is the greatest requirement of any building and the materials deployed and the construction system are secondary to this primary need. Beauty according to Taut consists in the direct relationship between the building and its purpose, in the appropriate features of the materials and in the elegance of the construction system. Nothing exists in isolation, the building, its components, its relationship to an internal courtyard or a street, or surrounding buildings are all equally important, the product of a collective and social way of thinking.

\textsuperscript{28} Ibid
\textsuperscript{31} Bruno Taut was one of the leading members of the CIAM.
The end of the Second World War generated a desperate need for buildings of all kinds and a new generation of architects to respond to it. National economic circumstances led to the necessity of restricting capital expenditure on building and the three building types that were most required to restore normal life into the cities were housing, schools and factories\(^{32}\). The architect’s role was thereby restricted in two ways: the government was compelled to forbid, as a general rule, all building except the three essential kinds aforementioned and so the emphasis was and still is on the cheapness as altogether to inhibit the architect’s free exercise of his art. The cheerful side of the economic stringency brought architecture in close relationship to social needs as never before.

The formation in 1928 of CIAM: Congres Internationaux d’Architecture Moderne was the beginning of the international academic dialogue in modern architecture. Founded by the Swiss Madame Helen Mandrot\(^{33}\) with Le Corbusier and Sigfried Giedion, CIAM’s first meeting was held at her chateau at La Sarraz, near Lausanne, and was attended by Gropius, Le Corbusier and others. Together, these architects of the Modern Movement drew up a declaration emphasising that building was once again to be linked to economic and political issues, rather than to historical architectural formulas. The organisation’s founding declaration was signed by twenty-four architects at La Sarraz, Switzerland, in 1928. The La Sarraz Declaration asserted that architecture could no longer exist in an isolated state separate from governments and politics, but that economic and social conditions would fundamentally affect the buildings of the future. The Declaration also asserted that as society became more industrialised, it was vital


\(^{33}\) In 1927, the competition of the League of Nations and the Stuttgart exhibition proved that a majority of architects in European countries were working with similar methods and that their contributions were reconcilable among themselves. So in 1928, this hypothetical unity was translated to an association, through an opportunity offered by Madame de Mandrot to hold a congress of modern architects at her castle of La Sarraz.

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that architects and the construction industry rationalise their methods, embrace new technologies and strive for greater efficiency. The founding of CIAM in 1928 has been cited as the beginning of the "academic" phase of modern architecture. The organisation and its membership were extraordinarily influential in the development of contemporary architectural and urban planning theory. Through its congresses and publications, CIAM served as an international forum for progressive theoreticians and practitioners in design.

CIAM’s early attitudes towards town-planning were stark: “Urbanisation cannot be conditioned by the claims of a pre-existent aestheticism; its essence is of a functional order... the chaotic division of land, resulting from sales, speculations, inheritances, must be abolished by a collective and methodical land policy.” At this early stage the desire to re-shape cities and towns is clear. Out is the “chaotic” jumble of streets, shops, and houses which existed in European cities at the time; in is a zoned city, comprising of standardised dwellings and different areas for work, home, and leisure.

Kenneth Frampton highlights the following vicissitudes of ideology that influenced post war modern architecture:

The idea of modern architecture includes the link between the phenomenon of architecture and that of the general economic system. The idea of economic efficiency does not imply a production furnishing maximum commercial profit, but a production demanding a minimum working effort.

The need for maximum economic efficiency is the inevitable result of the impoverished state of the general economy.

The most efficient method of production is that which arises from rationalisation and standarisation. Rationalisation and standarisation

34 Le Corbusier, one of the movement’s founders, often liked to compare the standardised efficiency of the motor industry with the inefficiency of the building trade.
act directly on working methods both in modern architecture (conception and in the building industry, realisation). Rationalisation and standardisation react in a threefold manner:

They demand of architectural conceptions leading to simplification of working methods on the site and in the factory.

They mean for building firms a reduction in the skilled labour force; they lead to the employment of less specialised labour working under the direction of highly skilled technicians;

They expect from the consumer (that is to say, the customer who orders the house in which he will live) a revision of his demands in the direction of a readjustment to the new conditions of social life. Such a revision will be manifested in the reduction of certain individual needs hence forth devoid of real justification; the benefits of this reduction will foster the maximum satisfaction of the needs of the greatest number, which are at present restricted.\(^{35}\)

Ludwig Mies Van Der Rohe, along with Le Corbusier and Walter Gropius, has been one of the twentieth century’s most influential architects. Despite having no formal architectural training, his influence can be seen in cities the world over, from Anchorage to Adelaide, and the term ‘Miesian’ is now used to compliment the simplest, most elegant examples of modernist architecture. This emerging inclination towards purity of form can also be seen in Mies’ seminal German Pavilion, commissioned as Germany’s ‘stall’ at the 1929 International Exposition in Barcelona. Here, a marble roof appears to float above a collection of travertine and marble slabs. Using subtle steel columns to support the roof, Mies was able to connect roof and ground with expansive glass ‘walls’. The whole effect is a building zen-like in its simplicity, an astonishing contrast to the

ornate architecture of the time. Mies left Germany when it became clear that, unlike their Italian counterparts, the German fascists would never wholeheartedly embrace modernist architecture. His famous phrase "less is more" perfectly captured his steadfast devotion to pure modernist design, and encapsulated the modernists' search for rational solutions to the complicated problems of urban existence. Corporate America was keen to offer Mies the opportunity to build his pure glass cuboids on their expensive slices of real estate. The most celebrated example was the headquarters for the whisky company Seagram. But for many people at that point of time what was the Seagram building but a corporate skyscraper in New York? - One among many - but it entirely changed the nature of skyscraper design. It created the plaza as a new form of public space, leading to changes in the zoning by-law. It also created a new model for lobbies, making them bigger, more spacious and open to the street - public in orientation- but it did all this in the service of a commercial corporate client. Completed in 1958, this 38-storey masterpiece was clad in bronze, with its own plaza keeping the rest of New York at arm's length. The effect is an incredibly elegant addition to Manhattan's jumble of towers, and the Seagram building remains the epitome of twentieth century corporate modernism Mies was a realist of sorts - a critical realist. He developed his way of working in Berlin in the 1920s when constructivists were mining the potential of new media, new technologies and new types for producing a new reality. They understood that the givens of the historical period were simply that - they were givens. They were not things that you could choose or negotiate, but things that you had to work within - but you worked within those critically. You worked within those transformatively. You worked within those to find new potentials - and, in some cases, to foreground the problematics that the original situation entailed, to make those problematics more visible. Mies
sought to develop a new vernacular for modern society out of the structures already brought forward by commerce and engineering. He sought to ennoble the generic and thereby enrich everyday life, providing an expanded horizon of experience and awareness. In fact, Mies wanted to have a much bigger impact than he ended up having, although his impact in the 1950s and 60s was pretty big. The housing project that he did for Lafayette Park in Detroit is an exemplar of housing - and, in fact, it’s a really congenial, liveable place today, much admired and valued by its occupants\textsuperscript{36}. It was even built as a public/private partnership - which is amazing in itself. This was in the early 1950s. He was working with a developer who was a philosopher by training; Herbert Greenwald. The urban planning of the project was done by Ludwig Hilberseimer who has been considered an unrepentant communist for the whole of his life. His reaction to new materials of the industrial age was that new materials are not necessarily superior; each material is only what we make it. For Mies the greatest idiom was ‘Less is more’ whereby, with the least material we are able to produce the most functional and beautiful piece of architecture. His work also signified that modern architecture believed in ‘God lies in details’. The Seagram building was detailed to the minutest elements such as door knobs and handles, railings and parapets.

Wells Coates\textsuperscript{37}, a founder member of MARS (Modern Architectural Research Group) expanded his philosophy in his paper “Response to Tradition”, written in 1933; “As young men, we are concerned with a future which must be planned rather than a past which must be patched up, at all costs... As architects of the ultimate human and

\textsuperscript{36} Detlef Mertins (Ed.) 1994 The Presence of Mies Princeton Architectural Press; New York, USA.

\textsuperscript{37} Coates was a founder member of MARS (Modern Architectural Research Group), the British wing of CIAM. He attended the famous 1933 CIAM Congress which produced the Athens Charter, and corresponded occasionally with Le Corbusier, Walter Gropius, and other architectural giants of the time. When MARS was founded by Wells Coates and five colleagues (among them, Maxwell Fry, architect of Kenad House) in 1933, its founding principles adhered strictly to the guiding philosophy of CIAM.
material scenes of the new order, we are not so much concerned with the formal problems of style as with an architectural solution of the social and economic problems of today. And the most fundamental technique is the replacement of natural materials by scientific ones, and more particularly the development of steel and concrete construction."

Born into a middle-class Jewish family, Lubetkin witnessed the Russian Revolution through his bedroom window whilst he was a young art student in Moscow. A commitment to socialism remained with him throughout his career. For Lubetkin and many of his fellow countrymen, art, including architecture, should be an instrument of social renewal, a means to a political end. Lubetkin would insist that architecture was politics “pursued by other means”. Before arriving in Britain in 1931, Lubetkin traveled widely in Europe, gaining formal training and meeting many of the giants of the modern movement. Arriving in Berlin in 1922, he worked in what was then the intellectual capital of the continent, before moving to Paris, the artistic capital, in 1925. In Paris he met Le Corbusier and studied under Auguste Perret, one of the pioneers in using reinforced concrete in architecture. Paris left a tremendous impression on the young Russian: the city is a combination of the aesthetic and the deliberately planned and this confirmed to him that rational thinking could produce an emotional, beautiful urban environment.

Tecton38, the practice Lubetkin founded with six British architects in 1932, quickly became the most potent exponent of the exotic new

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38 Led by Berthold Lubetkin, (1901-1990) the architectural practice Tecton combined a passion for social reform with a deeper knowledge of European modernism in the designs for the Penguin enclosure at London Zoo, the residential tower block of Highpoint, and the Finsbury Health Centre. The post-war housing schemes of Spa and Priory Greens set a thoughtful precursor to the onslaught of social housing projects which dominated London and set the pattern for other large scale redevelopment by Tecton’s successor’s architectural practices. Berthold Lubetkin is widely regarded as the most outstanding architect of his generation to have practiced in England. Almost all his surviving buildings have been landmarked, and his work and ideas continue to feature in architectural discourse and education. Lubetkin’s designs are characterised by clear geometric figures, technical ingenuity, and a functional resolution that show modernism at its most poetic and powerful. Famous works such as the

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Modern Movement in Britain. After designing the famous Penguin Pool and Gorilla House at London Zoo, Tecton started work on the seminal Highpoint One apartments in 1933. Originally designed as homes for factory workers, the block quickly attracted instead a thoroughly middle-class tenancy, eager to experience the joys of high-rise modern communal living in Lubetkin’s beautiful white double-cruciform landmark, which stood high on its hill in Highgate and looked down on the smog-ridden city below. Along with Wells Coates’ Lawn Road Flats of 1934, Highpoint One signaled the arrival of modernist housing in Britain. But it was in the much less salubrious borough of Finsbury that Lubetkin was given the chance to bring the revolutionary aspects of his architecture to the fore. Here the local left-wing council asked him to build a health centre to combat the dreadful conditions in the slums. The result, the Finsbury Health Centre, (FHC) is still in operation today. Built in 1938, ten years before the arrival of the NHS, the FHC exemplifies the conjugation of the aesthetic and the political environment (its graceful white curves and shining glass bricks contrasted sharply with the Victorian horror surrounding it). Finsbury was, and remains, one of London’s poorest boroughs. In the 1930s lice, rickets, and diphtheria were common and most residents suffered from poor housing and atrocious, vitamin-deficient diets. In Britain as a whole, 2,000 people per year died of whooping cough and tuberculosis killed 30,000 annually. The local council, one of the most left-wing in Britain, set about tackling these problems with the ambitious ‘Finsbury Plan’. The idea was to build a comprehensive health centre amid public baths, libraries and nurseries. In the end, only the health centre was built. Nonetheless, Finsbury represents an important moment in the story of British Modernism. For the first time, an avowedly modernist architect (the Russian émigré Berthold...
Lubetkin), had been awarded a municipal commission (the 1935 De La War Pavilion was the result of a competition). The Centre incorporated a Tuberculosis clinic, a foot clinic, a dental surgery, and a solarium. Lubetkin wanted people to feel welcome but never patronised. He also wanted the Centre to be like a club, or a drop-in centre another aspect of the modern way of life relaxed and unthreatening without formal waiting room rows. It was important that people should not feel they were walking into just another bureaucratic staging post. Lubetkin also wanted the Health Centre to persuade people to live healthier lives, as well as treat their ailments. Murals on the walls encouraged patients to get some fresh air. The glass bricks of the front wall were a conscious attempt to "propagandise" the physical benefits of a light, airy environment. The solarium allowed the children of Finsbury (who spent much of their early lives enveloped in a thick smog), a chance to feel the benefits of sunlight. Of this revolutionary new approach to public health, Lubetkin famously commented "Nothing is too good for ordinary people"\(^{39}\). Winston Churchill tried to ban an Army Bureau poster of the Centre which compared its promise with the reality of the nearby slums—which is the essence of modernism in this ‘heroic’ period. Yet Lubetkin’s legacy had already been secured through his determined effort to bring the beauty and vaulting social ambition of modernist architecture to Britain.

Edwin Maxwell Fry was one of the few active modernist architects in pre-war Britain who was actually British. His long career saw him lay the solid foundations on which British modernism would expand, and also pioneered modernist building in the Third World, through his work in Nigeria after the Second World War and in the Punjab, India, with Le Corbusier. Born in the last year of the nineteenth century, Maxwell Fry was part of the generation of architects who came of age just as it was
becoming apparent that British architecture was being left behind by the innovative strands of modernism developing on continental Europe. Whereas Le Corbusier, Ludwig Mies Van Der Rohe, and the architects and designers of the Bauhaus were experimenting with new forms and materials, and exploring new ways to treat space, light and nature in their work, British architecture seemed to be stuck firmly in the Victorian age. In 1933, Maxwell Fry was a co-founder of MARS (Modern Architectural Research group), the British affiliate of CIAM. This was the body responsible for formulating and promulgating the ideals of modernist architecture in continental Europe. Wells Coates, Maxwell Fry and the four other co-founders of MARS were determined to end Britain’s isolation from the momentous architectural movement occurring across the English Channel. Well Coates’ main contribution to bringing modernism to these shores was his Lawn Road Flats (also known as the “Isokon Building”) in 1934. An exercise in modernist minimalist living, these flats soon became, like that other great pre-war modernist block, Highpoint One by Berthold Lubetkin, a haven for middle-class intellectuals. But if the modernists were truly to achieve their goal of using architecture to improve the lives of the majority of people in Britain, then they would have to demonstrate that they could build housing for workers as well as intellectuals. With Kensal House (completed in 1937), Maxwell Fry achieved just that. Kensal House represented a tremendous breakthrough for modernism in Britain. Commissioned by the Gas Light and Coke Company, which wanted a showcase building to demonstrate the convenience and effectiveness of gas power, the estate was built on the site of an old gasworks in west London. Fry worked with Elizabeth Denby, a prominent social reformer of the time, to create an estate which would provide tenants with clean spacious housing and with shared amenities such as a creche, a laundry room and a canteen.  

40 Elizabeth Denby (1894-1965) was a housing consultant best understood as forming part of a tradition of influential women space-

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Kensal House was a clear example of what modernists could achieve, if given the opportunity. His Impington Village College in Cambridge (built in collaboration with former Bauhaus director Walter Gropius) also served as a pointer for post-war educational architecture. Henry Morris was Education Secretary for Cambridge during the period 1922 - 1954, and it was his genius which allowed him to expand the idea of rural secondary schools into the idea of Community Colleges. The building would house the secondary school during the day and then provide educational, cultural, and leisure opportunities for adults during the evening. 'Every town and every village must have its educational buildings,' wrote Henry Morris. 'Education touches every citizen. We have a conception of a new institution for the countryside, an institution that will touch every side of the life of the inhabitants of the district in which it is placed.' ...'A standard may be set and a great tradition may be begun.' ... 'If the Village College is a true and workable conception, the institution will, with various modifications, spread over rural England; and in course of time a new series of worthy public buildings will stand side by side with the parish churches of the countryside.' Henry Morris took care to see that the buildings of the new colleges were designed by excellent and innovative architects. Impington Village College was designed by Walter Gropius (Founder of the Bauhaus School of Architecture) and his partner Maxwell Fry. The land for the new college was given to Cambridgeshire Education Committee with generosity and philanthropism by the Chivers family in memory of John Chivers. The Village Colleges were a revolutionary and expansive concept which has proved a brilliant success and been blessed by many for the opportunities it has given them. A monument commemorating the work of Henry Morris was erected at Shire Hall, Cambridge. The border wording is 'Education is a continuous progress extending through childhood, youth and the whole of adult life'.

41 Henry Morris took care to see that the buildings of the new colleges were designed by excellent and innovative architects. Impington Village College was designed by Walter Gropius (Founder of the Bauhaus School of Architecture) and his partner Maxwell Fry. The land for the new college was given to Cambridgeshire Education Committee with generosity and philanthropism by the Chivers family in memory of John Chivers. The Village Colleges were a revolutionary and expansive concept which has proved a brilliant success and been blessed by many for the opportunities it has given them. A monument commemorating the work of Henry Morris was erected at Shire Hall, Cambridge. The border wording is 'Education is a continuous progress extending through childhood, youth and the whole of adult life'.

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the Bauhaus School of Architecture) and his partner Maxwell Fry. The land for the new college was given to Cambridgeshire Education Committee with generosity and philanthropy by the Chivers family in memory of John Chivers. The far reaching effects of the modern movement can be perceived in various facets whether it was housing, rehabilitation, slum up-gradation, healthcare infrastructure, and education for all and so on. More important was the challenge of devising forms appropriate to the function the form (building) would fulfil as there were no precedents or exemplars to fall back upon, no prototypes in history to inspire, and the paucity of time loomed large in front of the architects. So, practically people from all walks of life with a vision towards improvement of society were beginning to spearhead the modern movement through their writings, political positions, power structures, engineering skills and architectural acumen.

In 1951, Fry and his wife Jane Drew, who had collaborated on a book on architecture in a tropical climate, were invited to help design and build Chandigarh, the new capital of the Punjab in India. Le Corbusier designed most of the prestigious public buildings in the new city, whilst Fry and Drew oversaw much of the housing. Unlike many of the early Modernists in Britain, Maxwell Fry was not a socialist. Instead he had a liberal, patriarchal outlook which informed his belief that professional middle class architects like himself should use their skills to help build a better environment for those less fortunate. As architect of the first Modernist social housing estate in the country, he deserves a place as one of the most important Modernists in pre-war Britain.

The Bauhaus school of industrial design was founded in Germany in 1919. Although in existence for only fourteen years, its influence on modern architecture and design has been immense, and many of its famous students and masters gave the Modern Movement a
philosophical, as well as practical, grounding in the volatile years of the early twentieth century. The aim of the Bauhaus was to heal the schism between the arts and the crafts. Students (who usually numbered one hundred) were taught to be as proficient in artistic fields as in the technology of production. Walter Gropius, a German architect and teacher, and the school’s first director was a great believer in mass production and insisted that the students master the production process from start to finish, so that their artistic sensibilities would be informed by the possibilities of new technology. Gropius and the Hungarian artist Laszlo Moholy-Nagy encouraged students to make contact with industrial companies around the town of Weimar, where the school was based. The drive for mass production, and consequently standardisation, were central to Modernist architects’ vision of reshaping our cities. Walter Gropius gathered around him some of the brightest artists and designers of the time, including the painters Paul Klee and Wassily Kandinsky and the designer Marcel Breuer. But the avant-garde nature of the Bauhaus was anathema to the growing influence of National Socialism in Germany. In 1925, after the Ministry of Education had cut down its grant, Gropius announced the school’s closure. There it might have ended but for an offer from the industrial city of Dessau. In 1926, the Bauhaus relocated to a new purpose-built school, designed by Gropius and Swiss architect Hannes Meyer. Clean, modern, and confident, the new building signaled that the school’s time had come. The following years were the heyday of the Bauhaus. Marcel Breuer and his students began to produce revolutionary tubular lightweight chairs, and the department became a valuable source of income for the school. The form of these products

43 Nagy, Laszlo Moholy. 1895-1946 was a Hungarian painter and professor at the Bauhaus School, and founder of the ‘Photograms’ a modern technique for the generations of photo prints of drawings using sunlight. His theory of art and teaching was summed up in the book The New Vision- from Material to Architecture. He experimented with the photographic process of exposing light sensitive paper with objects overlaid on top of it, called a photogram.

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increasingly became derived from function, an approach to design with which Bauhaus is still synonymous.

However, the 1930s was also a time of disappointment for many of the bright young men of modernism. They wanted to change the world and yet commissions were few and far between. Coates saw it as his duty to keep the pure flame of modernist doctrine burning, to formulate clearly what kind of buildings modern architects should be producing, until such time as the world caught up with their thinking. Thus modern architecture had a great responsibility to fulfil. In contrast to the preceding styles such as Art Nouveau or Expressionism etc., it had to respond to diverse dimensions of economy, means and methods of production, rationalisation and standardisation as well as the maximum fulfilment of a large user base, As Bertrand Russell asserts in his “History of Western Philosophy”, that scientific technique requires the cooperation of a large number of individuals and modern techniques conferred a sense of power where man was in control of his environment, but the power conferred is social not individual44. This point about “larger user base” actually fits in with a variety of changes that were taking place in the world. In sociology/history the point has been made by Satish Saberwal, a Jawahar Lal University, New Delhi based historical sociologist, who says that the “scale of the world was enlarging” during this period in a way far dramatic than had ever happened till now. For my research I wish to draw upon the concerns of prominent architects who were trying to find ways to cope with this change. Modern Architecture ushered in an era of ‘prefabrication’ wherein building components could be mass produced in the factory and assembled elsewhere yielding a dual advantage—a quicker construction process, and eliminating the uncertainty of individual enterprise. Therefore we see that factory production affected building technique and building
appearance through the use of time tested materials. Modern architecture recognised that machines and factories are the essence of the modern age. Speed being another denominator of the modern world brought in the preference to factory line production as against handicraft and singular craftsmanship.

Modern architecture addressed the utilitarian basis and took the opportunity provided by new materials and methods that science had made available to rescue architecture from the stagnation of stylistic revivals. The functionalist aspect was publicised as the best way of instilling into the public, the importance of being practical first and foremost\textsuperscript{45}. Modern Architecture found it necessary to return to first principles. The past was therefore not rejected, but inherited and understood in new ways. Moreover, modern architecture itself eventually created the basis for a new tradition with its own themes, forms and motifs\textsuperscript{46}.

The architecture of the “modern time” could be qualified as experimental as Siegfried Gideon emphasised in 1928 since it relied heavily on “laboratory” and “temporary” materials such as concrete and steel and participated in processes constructed and monitored as ‘scientific experiments’ on the way to a productive and eugenic society. The flexibility of the use of glass bricks, steel windows, reinforced concrete and the extensive use of lightweight materials, and industrial finishes did not lead to monotonous or ubiquitous solutions, but were characterised by a flexibility of use offering responses to varied programmes. More importantly their use was governed by a concern for ergonomics and for the economy of space and of resources reflecting the growing concern for economic issues. Architecture was simultaneously addressing new, broader constituencies. Thus we arrive

\textsuperscript{44} Russell, Bertrand. 1996. \textit{History of Western Philosophy}. Routledge; London.p.479.
\textsuperscript{45} Richards, JM. 1940. \textit{An Introduction to Modern Architecture}. Pelican / Penguin Books; Great Britain.

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at the various issues that concern modern architecture with reference to this research:

FUNCTIONALLY: It aims at the creation of new environments fit enough for human activities.

AESTHETICALLY: It is the creation of fit environments for living within which human activities take place. It is the creation of sculpture big enough to walk inside and most important it is developed out of an accurate setting forth of practical demands, wherein there is no loose end in programme or function.

ECONOMICALLY: Its application is monitored to achieve maximum economic efficiency.

Modern architecture is not just because new functions have arisen. It is due to industrialisation, development of factory towns, Steam Age, societal change (daily life of men and women had transformed, in came the emerging concept of the servant less house, improved housekeeping gadgetry, working mothers, and new concepts such as the house as a machine to live in, new building materials and techniques to rapidly and efficiently (in a systematic manner) make available accommodation for new functions.

The preceding account helps to build the construct of the term ‘modernity’, perceived as a ‘project of emancipation’⁴⁷, breaking free from the diminishing authority of the church and rejection of ecclesiastical scholarship⁴⁸. Modernity has don the cloak of scientific enquiry, gently stepping into its new responsibilities—carrying mankind into what is called the “third great transformation”⁴⁹, the crystallisation of modern industrial society and its spread over the planet. Modernity

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⁴⁹ Encyclopedia Britannica
may be understood as a project of the enlightenment\textsuperscript{50}, which aspired to create persons, who would, after the fact, have wished to have become modern. It is the state of being modern, and has the attributes of the modern such as socialism, egalitarianism, within which the truths of utility, calculation and science take precedence over emotions, the sacred and the non-rational\textsuperscript{51}. Modernity assumes that the associations in which men live and work are based on choice and not on birth, that work be separated from family, residence and community...\textsuperscript{52}.

Modernity is not a western concept alone, it is based on revolutionised modes of governance with the emergence of democracy, the modern nation-state and its institutional apparatus, the predominance of man and reason and the penchant for metanarratives such as progress\textsuperscript{53}. It is especially peculiar to third world decolonising states. Modernity is the only system in human history with a backing of technological capability, the social organisation and a systemic will-to-power to comprehensively reshape the world in its own image\textsuperscript{54}.

History has presented a linear open progression of men, perpetually making and remaking the world. Through the ages one perceives the growth of man through social, cultural, economic and technological transformation, development and advancement. Modernity has been viewed as a future oriented enterprise. As a rational, clear perception of means end relationship, modernity implies the acceptance of scientific, universal rationality. It is secular in nature as it explains the

\textsuperscript{50} Encyclopedia Britannica defines Enlightenment as a movement of thought and belief concerned with the interrelated concepts of god, reason, nature, and man that claimed wide assent among European intellectuals in the 17th and 18th centuries. Although diverse in its emphases and interests, the Enlightenment attacked the established ways of European life and, in its conviction that right reason could discover useful knowledge, aspired to the conquest of man’s happiness through freedom.

\textsuperscript{51} Rudolph, Lloyd I and Rudolph, Susanne Hoeber. 1967. \textit{The Modernity of Tradition-Political Development in India}. University of Chicago Press; USA.

\textsuperscript{52} Ibid

\textsuperscript{53} Ibid

\textsuperscript{54} Ibid
phenomenal world in terms of scientific theories. It does not rely on religion, spiritual, moral revelation in order to make sense of the world. Modernisation is an ongoing continuous process and not a one time finished product (as is often misunderstood) and represents the ‘zeitgeist’, the free spirit of its time. Modernisation which is often exchanged for the word westernisation, for the purpose of this research is related to the processes involving mechanised means of mass production, modern modes and ways of thought, rationalisation and standardisation (of building types), having no precedence or trace in earlier times. It has its basis in the industrial society, where machines dominate all activities liberating men to pursue other creative pursuits. It signifies a step into the future, a spirit of the contemporary, the present and not of antiquity. Therefore modern is that which represents the present and modernity which describes the attributes of the modern.

So, modernity, which is often shunned ‘as a thing of the west’, assumes a more encompassing meaning. Consider the ambivalent nature of modernity: on one hand it is a symbol of rationalist, materialist, mechanical thoughts wherein the primacy of engineering (technology) is the actual symbol of human creativity. On the opposite scale modernity signifies uncertainty, mystery and romance and adventure\textsuperscript{55}. Because it is the happening thing therefore the next moment is yet to be revealed, thus the enigma, the suspense, the uncertainty is associated with modernity.

The interpretations of modernity are twofold – as a programmatic fashion, modernity presents a ‘project’ of progress (for betterment as said above) and emancipation, emphasising its liberating potential. The second is the transitory fashion, which signifies the transient (and

\textsuperscript{55}Ibid (Colonisation is only the starkest form of this reshaping, beginning with pre-modern Europe itself and passes through the de-population and re-settlement of the New World to the direct and indirect subjugation of the globe.)
momentary) quality of modern phenomena. Modernity is the transitory, fugitive, and the contingent half of which the other half is eternal, immutable (unchangeable\textsuperscript{56}. Through the industrialisation process, as the strongest environmental impact during the late nineteenth and early twentieth century, modernity engulfed the world after an initial pioneering period in Europe. Each region reacted differently to this process, resulting in regional expressions and nuances, which were enhanced by the cultural isolation that occurred due to the Second World War. Eventually these different expressions had an impact again on the region of origin, creating a complex pattern of fertilisation and cross fertilisation\textsuperscript{57} (which finds further reference in this research as the East West dialogue).

At this point in the research, it is pertinent to understand as to why the twentieth century is so important to the discussion on the three m’s; modern, modernity and modernisation. Building in the twentieth century represents aspects, which have not been represented in preceding centuries. The architecture of the twentieth century was conceived with the aim of expressing the opportunities and optimism of the new age. Architecture, which was to be the highest form of artistic expression, was based on a new vision of artistic abstraction, a new understanding of spatial qualities which utilised new technology, structural innovations and new materials\textsuperscript{58}. It enabled mass production through mechanisation and prefabrication and was to provide the infrastructure for the new society, to raise levels of hygiene, amenity and standards of living. Architecture was to be a powerful tool in social reform.

\textsuperscript{55} Hubert-Jan Henket & Heynen Hilde.2002.Back From Utopia The Challenge of the Modern Movement.010 Publishers; Rotterdam, Netherlands. [Engaging Modernism].

\textsuperscript{56} Ibid

\textsuperscript{57} Van Oers, Ron. 2003. World Heritage Papers, No.5 UNESCO. 7, Place de Fontenoy, Paris. ‘Identification and Documentation Of Modern Heritage’
The modern city which was a new conception, originated when the growing population crowded new centres to serve new and fast expanding industries which resulted in such an increase in land values in the centre of cities and such a density of housing that traditional forms of housing were no longer practical. During this new time, building types emerged whereby the task of designing buildings became very challenging, as needs were constantly changing and problems were without precedents.

By 1931, *The International Style* by Henry Russell Hitchcock and Philip Johnson had been published and the influence of the modern movement began to be felt across the globe. There was not only an emergent aesthetic language, but also universality in the use of new, untried and developing materials such as concrete, metals like aluminium, plastics and so on.

The roots of modernity are referred to the Age of Reason, an era that established cultural paradigms reflected in present-day society. According to Isaiah Berlin, there are two principal factors that have shaped human history and are extremely noteworthy in the twentieth century: the development of natural sciences and technology and, the development of ideologies: dictatorships, nationalisms, racism and religious intolerance.

The impact of these can be seen in the choices that have characterised the design of our built environment. The twentieth century has also witnessed the growing sizes of cities, urbanisation, development of

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60 Ibid

61 Ibid


63 Isaiah Berlin (1909-97) was a British philosopher, historian of ideas, political theorist, educator and essayist.

64 Ibid

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methods and solutions for production in large quantities, followed by a need for rationalisation and standardisation. The modern movement that followed emphasised the city as a primary focus, seen as an organic machine, functionally associated with the needs of the working class, the requirements of hygiene, economy and education. It also introduced a new political basis to meet the objective of social life, an influence carried forward in post world war building. All these phenomena had no earlier precedence and therefore called for unique solutions and approaches in intellectual exercise.

The modern movement with its enduring principles had a post war optimistic social flavour. It arose with the awakening of a group of enthusiastic young people such as Walter Gropius, Mies Vander Rohe, Le Corbusier among many others who wished to explore new possibilities of rational utility and democratic comfort, centred on the skills of professional planning and construction in an economic and subtle manner. The strength of the modern movement lay in the inevitable decline of the clamour about style, the visual fixation having been broken, the frame of reference changed. From then on the role of science and technology became increasingly important, as did the social goals of equality of provision for shelter within democratic freedoms. "The polemic of objectivity" was the hallmark of the modern movement, out of which arose a new architecture. Nothing short of mass, serial production, prefabrication and standardisation of building components could have solved the problems of a post war scenario that demanded fast, efficient and economic building and in this lay the significance of the modern movement.

The purpose of the modern movement may be viewed against a major setting of social and technological transformations, whereby it is registered that there is a gradual shift from rural to urban existence in

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the industrialising world. The precarious and daring challenge that the modern movement created was to devise means and new ways to strike a balance between the internal logic of discipline and the influence of cultural forces, between social and personal dimensions, between the unique order of the individual invention and that which is normative or typical.66

In the years following World War I, a new vision emerged, and to those who accepted the precepts of the Modern Movement in Architecture, much of the nineteenth-century building was anathema. In any event, the past was not to be copied; the debate over style was obsolete. The Modern Movement is linked to a variety of Architectural innovations appearing in the latter part of the nineteenth century. Industrialisation and the growth of the modern commercial city provided a new array of building types, and an increased range of technical possibilities. Although the turn of the century lacked a unified vocabulary of design, there was a growing conviction that the styles of the past would no longer suffice to express the needs and spirit of a changing society.67 Following World War I, the rhetoric of Modernism became increasingly forceful, wherein the modernist architects even though a minority, sought to attune their work to the technical possibilities, intensive urbanisation and progressive social concepts of the contemporary world.

The most striking aspect of the Modern Movement was the stylistic unity that emerged during the 1920s. By the close of the decade, the mainstream of modern movement reflected what came to be called the International Style. Simple geometric forms, finely finished surfaces, generous use of glass, and absence of ornament characterised it. The

67 Evenson, Norma. 1989. The Indian Metropolis - A View Towards The West. Yale University, Berkeley, USA.
68 Ibid
term ‘Machine Aesthetic’ came into use to denote the precise machined finishes inherent in the style, and to suggest a relationship between the new architecture and the products of industrialism. The International Style, a term coined by Henry Russell Hitchcock represented the modernist architecture that found its ways to other parts of the globe through three important ways.

a) Countries commissioned works of prominent architects from the West. Outstanding examples of this are the creation of the capital cities of Islamabad (Pakistan), Brasilia (Brasil), Tel Aviv (Israel), Canberra (Australia), Dodoma (Tanzania) and Chandigarh (India) as metaphors of a modernising society, freedom, expression of a nation’s independence, a celebration of a new moment, a step into the future, unfettered by the traditions of the past.

b) Presence of International corporations that brought with them modernist corporate architecture. The practical act of becoming an independent state in whatever form it took be it a republic, dictatorship, monarchy or socialist regime brought with it a need to express a psychological freedom from a colonial or foreign-dominated past or even a past seen to be wrapped in a mantle of tradition.

c) Architects trained in the west, returned to their native countries armed with new ideas and enthusiasm for modernism and its manifestation in the International Style.

Having dwelt upon the various meanings of the terms, one would now focus on the processes of Asia’s modernisation with special reference to the twentieth century. The process of Asia’s modernisation has been through an East – West dialogue, promoting exchange, wherein the west brought in modern modes of thought, which the east tempered through indigenous ideas of socialism, secular, and an egalitarian order. At the end of World War II, the process of decolonisation began

69 Ibid

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which coincided with the beginning of the Cold War\textsuperscript{71}, and gave birth to the “Third World\textsuperscript{72}” consisting of a host of new African and Asian colonies (cities) who gained independence between late 1940s and 1960s. Decolonisation released fresh hopes and energies in new nations such as Asia at a time when boundless faith was being invested in the idea of material progress based on rational, scientific technologies.

India as an example of Asian modernity thus became a new independent nation to serve as a repository of millenarian agendas of change and progress fuelled by domestic aspirations. Asian identity and modernity are recognised as originated in Asia itself and have been continuously shaped by Asian interaction with the rest of the world through various phenomena: industrialisation, urbanisation, westernisation, colonisation, decolonisation, nation building and the assertion of national and regional identities. The late nineteenth and twentieth century is also the most vibrant era of Asian modernity, where the east–west relationship was being constantly redefined through displays of simultaneous acceptance of and resistance to western ideologies, and of the struggles of placing modernity within the issues of cultural continuity and economic appropriateness.

\textsuperscript{71} The Cold War was the period of conflict, tension and competition between the United States and the Soviet Union and their respective allies from the mid-1940s until the early 1990s. Throughout the period, the rivalry between the two superpowers was played out in multiple arenas: military coalitions; ideology, psychology, and espionage; sports; military, industrial, and technological developments, including the space race; costly defence spending; a massive conventional and nuclear arms race; and many proxy wars. The Cold War drew to a close in the late 1980s following Soviet leader Mikhail Gorbachev’s summit conferences with United States President Ronald Reagan, as well as Gorbachev’s launching of reform programs: perestroika and glasnost.

\textsuperscript{72} Third World is a name given to nations that are generally considered to be underdeveloped economically during the 20th century. The name Third World arose during the Cold War to refer to nations that did not belong to the First and Second Worlds. While there is debate over the appropriateness of the term, and no alternative is without detractors, the term is one embraced by many Third World nations themselves, particularly in the Non-Aligned Movement.
“Besides the manifestation of ‘progress’ reflected in modernity the other major trend was of the social responsibility of the state\(^\text{73}\). Intellectual elite may have spearheaded the independence struggles, but they were supported by grass root movements. States often chose to express their independence by creating new foci for their administrative and symbolic cities, where there was a conscious need to express difference in the new settlements and capitals away from the colonial cities\(^\text{74}\). Although city building was a very expensive process for the state, post independence saw the emergence of new capitals such as Chandigarh (1950) the provincial capital of Punjab, in India, Islamabad (1961) in Pakistan, Brasilia (1957), Abuja Nigeria (1975), Dodoma (1976) Tanzania, where the capital complex marks the point in transition and signals the change to the modern state where power sharing is expressed through a parliamentary building (as in Dacca, Kuala Lumpur, Colombo and Kuwait city) even in instances where the reality is illusionary. The expression of nationalism, new forms of social organisations and the internal power structure that emerges (usually of the elite) are manifested in the urban form and architecture among other things.

The modern movement, which arrived in India almost at the same time as the rest of the world helped to rethink the nature and purpose of architecture for a modern, secular and democratic society. It is also to the credit of the tenets of the modern movement and its practitioners in India that it did not become a fossil; but paved the way for the modern yet appropriate architecture for India, its own version of


indigenous urbanism and regionalism - wasn't that the whole objective of the modern movement to begin with? 

No doubt we were trying to get over the colonial imprint whose architectural and urban arrangements were aimed at demonstrating their visible presence and unquestioned authority “...No one will deny that for us, and even for those who have a strong affection for original oriental things and believe in their great value, and are ambitious to conserve what is sound and beneficial in our indigenous civilisation, we can only do so by assisting very largely the influx of Occidentalism. But at the same time we have the right to insist and every sagacious man will take pains to insist that the process of introduction will not be rash and ignorant, that it shall be judicious and discriminating. We are to have what the West can give us, because the West can give us just what can rescue us from our present appalling condition of intellectual decay, but we are not to take it in a haphazard way, rather we should find it expedient to select the very best that is thought and known in Europe and to import that with the changes and reservations which our diverse conditions may be found to dictate. Otherwise instead of a simple ameliorating influence, we shall have chaos annexed to chaos, the vices and calamities of the West superimposed on the vices and calamities of the East.

One of the major Indian (pre-independence) cities to have experienced the western imports was Bombay and it is popularly known that the changes and growth trends in Bombay signify the arrival of the “Modern” in India. From 1919, the closing year of World War I, radical transformations can be seen in terms of its social makeup and physical structure on account of new industries being set up. The

period also saw the rise of a class of educated intellectuals and the emergence of a large middle class (from clerks, secretaries, salesmen, to professional managers, bureaucrats). The 1920s began auspiciously as a building boom came up but ended suddenly with the great economic depression that hit worldwide. The process of land reclamation in Bombay again picked up in 1930s and a rising population, due to inflow from the hinterland, called for speedy development of social housing, transport lines, commerce, healthcare, health and entertainment besides the growth of industrial estates, banks, stock exchange...Thus Bombay took a national lead in social transformation as the forerunner of modernity in India reflecting the affluence of the West, offering new lifestyles (concept of commuting to work, eating out, going to the cinema, clubs, living in flats as compared to the traditional bungalows ...), signifying the dawn of the modern era in India.

To grow modern is to learn the knowledge system of the west. It is true that with colonialism began India’s encounter with modernity. There are two arguments: The coloniser was not eager to modernise the Indian colony, instead he was forming alliances with feudal and traditional elements to perpetuate his own order. Yet it cannot be denied that with colonialism the process of westernisation was also increasingly becoming visible. To say it in simpler terms -both processes of westernisation and modernisation were occurring simultaneously yet despite having a dialogue with the West; India did not lose her critical orientation towards modernity. Nehru brought in the articulation of the agenda of modernity (criticized by Gandhi). Nehru symbolised the arrival of modernity, a great tradition of modernisation with industrialisation, urbanisation, and increased

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network of communication and growth of nationalism whose cultural significance is enormous.

The most celebrated architectural and town planning project to mark India’s independence was the creation of Chandigarh, the new capital of Punjab, which was begun in 1950. With Independence came partition and Lahore being awarded to Pakistan, left a near political vacuum in Punjab, India. Of the various choices, to site the new capital, Chandigarh was conceived as a brainchild of Le Corbusier and Jawaharlal Nehru to provide the ‘maison des hommes’ for a displaced population and to celebrate our newfound independence leaving behind the colonial imprints. In meeting these challenges, India did not turn to the past, but took the opportunity to take her place as a modern, progressive country amid the comity of nations. Thus Chandigarh was realised, embodying the principles of the CIAM evolved by Le Corbusier as the ambassador of the Modern Movement in Chandigarh and India as well and ushered in Modernity.

A brainchild of Le Corbusier, whose place in history is invulnerable, the city derives its urban form from a well ordered matrix of the generic neighbourhood unit – the Secteur deriving their architectural vocabulary from compositions in brick, lime plaster and exposed concrete, the hierarchical circulation pattern – the 7Vs (Les Sept Voies) and, the distribution of densities resulting in a fine grain, uniform texture for the city fabric79. Among the tools designed to regulate the ordering of the city’s architecture were extensive visual controls covering volumes, materials, textures, fenestrations extending up to the provision of a peripheral green belt – the ‘Periphery’ which set the limits to the built mass of the city80. Located at the foothills of the Shivaliks, nestled between two seasonal rivulets, with potential to grow

79 Joshi, Kiran. 1999. Documenting Chandigarh Volume I. Mapin; Chandigarh Perspectives; India.

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southwards, Chandigarh signified India’s independence,— heralding in its newfound freedom, a project of modernity, a moment of celebration, and emancipation from the past into the future. Planned as a finite sized entity, which would harness its resources for the present and preserve its assets for future generations, Chandigarh has served as a role model for the development of New Towns in India and abroad. Chandigarh which was to serve as the capital of East Punjab (since Lahore was awarded to Pakistan in 1947) was envisaged during a time of political and social exigencies. It was to be a new city ‘unfettered by the traditions of the past, a symbol of India’s new found freedom’ – a step into the future. The city was planned with a definite goal – a government city – an administrative centre. It also had a social manifesto – a city which would offer all the amenities to all classes of people to lead a dignified life. Based on Le Corbusier’s Statute of the Land, which governed Chandigarh, the new city would cater to the needs of man and nurture his relationship with nature.

In the following chapters, the attempt would be to build an understanding of how Chandigarh, a brainchild of Le Corbusier, the chief protagonist of the modern movement, is a city of modernity vis-à-vis principles of the International Style and how it is an example of twentieth century modern heritage.

81 Bagga, Sangeeta. 2004. 4th mAAN International Conference, Shanghai, China. 'The Reception of Post Modernism in Chandigarh: It’s Changing Residential Landscape’, Session: Examining Twentieth Century Modern Heritage.'