



Le Corbusier and Chandigarh: Delineating the Social Determinants in Architectural Planning

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ABSTRACT *Planning has been associated with terms like welfare, opportunities etc. But at the same time does planning reflect the aspiration of the masses? Or does it reflect the aspiration of the nation state? This article is an attempt to understand the governing principles and traces the social determinants which influenced the planning of Chandigarh. LeCorbusier, the primary architect of the city was well known for giving 'ideological' meaning to his architectural planning. This article attempts to unfold the various ideological meanings associated with planning and argues how it leads to 'standardization'.*

INTRODUCTION

According to the Institute of Town Planners, India, planning is, "a dynamic profession that works to improve the welfare of the people and their communities by creating more convenient, equitable, healthy, efficient, sustainable and attractive places for the present and future generations." Le Corbusier's master plan for Chandigarh brought him enormous recognition. Charles Edouard Jeanneret, better known as Le Corbusier (1887-1965) was well known for his work in modern architecture. His early projects played a major role in the emergence of Modern Architecture. He was famous and responsible for the two most important cities of the 20th century: the new capital city of Chandigarh which came up in the 1950s; and then, a few years later, the new capital of Brazil, Brasilia, designed by his student Oscar Niemeyer with whom he had worked in Brazil in the 1930s. An attempt is undertaken in this article to first outline the key elements of his Architectural designs for Chandigarh and to further trace its social determinants.

THE PLAN AND THE PHILOSOPHY OF LE CORBUSIER

Le Corbusier played a key role in initiating one of the most formative movements in European Planning that was based on idealism. Le Corbusier and his team members of the Congress Internationauxd' Architecture Moderne (CIAM) drew the master plan for Chandigarh. The team members comprised of Jane Drew and Maxwell Fry from Britain and Le Corbusier and his cousin Pierre Jeanneret from France. CIAM became a rallying point for the Modern Movement in Architecture and Urbanism. This Modern Movement substantially influenced the making of Chandigarh. The relevance of the Modern Movement in architecture and building was a means for adapting the existing traditions, methods of construction, and building form to the changed conditions brought about by increased mechanization. It was the moulding of institutional practices to the needs of modern industry (Sarin 1982). Le Corbusier's search for a new philosophy was in harmony with the Machinist Era. He viewed this Era with supreme optimism. He gave a call for - bold expression through urbanism, of society's confidence in the future! For him, city planning, besides being a science, was the noblest of the Arts, the expression of the activity of an epoch (Sarin 1982). Le Corbusier's idea of urbanism and urban planning is reflected in the determinants which are discussed below.

WHY STRAIGHT ROADS?

Le Corbusier contributed an important element to the concept of modern urban planning through the careful planning of the road and transportation system. He drew an elaborate plan for the roads like the human circulatory and respiratory system. This for him constituted an important element of the modern plan. He constituted the rule of 7 V's for planning of the roads and transportation system. The 7 V's symbolized 7 different road tracks. The rule of 7 V's is outlined below:

V1: Inter-continental national or provincial routes crossing the country or the continents.

V2: Municipal creation, type of artery essential to an agglomeration.

V3: Reserved exclusively for mechanical circulation, they have no foot paths; no door from a house or other building which will open on to them. Colored traffic lights must be set up at every 400 meters thus, permitting to vehicles a considerable speed. The V3 has as a consequence, a modern creation of town planning: the sector.

V4 Shopping street of the sector, primarily for pedestrians.

V5: Penetrating into the sector, it will take vehicles and pedestrians to the doors of the houses with the help of V6

V7: Roads feeding the length of the green belts where schools and sports are situated.

In his book, Town Planning of the Three Human Establishments (1976), Le Corbusier argues that a total application of the rule of the 7 Vs (in practice 8 V's) was carried out at Chandigarh, the new capital of Punjab. In his book, Town Planning of the Three Human Establishments, he demonstrates an additional rule of 'V8'. The rule of V8 signifies the road for the bicycles. He argues that the motorcar and the bicycle cannot be in the same path as the motorcar has four wheels and the bicycle has 2 wheels. The roadway system in Chandigarh shows that motorcars would dominate the traffic as the road planning caters mainly to the mechanized roadway system. The roads are organized in straight lines so that the man in the car has no disturbance and can have the joy of driving on the straight road.

Le Corbusier contributed an important element to the concept of modern urban planning through the meticulous planning of the road and transportation system. In addition to this, he built open green spaces for the pleasure of the residents of the city who spent their day in carrying out mundane activities. The element of 'joy' was very important for Le Corbusier as a feature of urban planning. He felt that to create space for 'joy of living' was very important for the residents of a city. This was the rationale for building straight roads, so that the man in the car could experience the joy of driving on wide roads. Though Corbusier had faith in the machinist era, he also recognized that it was filled up with drudgery. This is why he proposed that the Green Factory should replace the Black Factory. He felt that experts, architects, artists, urban planners should be put in charge of protecting the community. He believed that it was the responsibility of experts to plan the city with their expert scientific knowledge. They had the scientific know-how to build through a mechanized way. This method creates and adds a certain harmony, order, discipline and beauty to the world of art and architecture. Le Corbusier was a great advocate of discipline, order, beauty which he believed could be achieved in the machinist era through scientific ways. The important determinants of his planning included Roadway and Transportation System, Open Green Spaces, Mechanized way of building, The Green Factory Model and so on.

CONFLICTING PERSPECTIVES ON 'MODERNITY':

The association between Nehru and Le Corbusier played a key role in the making of Chandigarh. Le Corbusier and Jawaharlal Nehru agreed that Chandigarh had to be a modern city, and shared a close friendship around that agreement, but their outlooks never really completely matched. While Le Corbusier's modernism was shadowed with the image of a poor and primitive India, Nehru's modernism aspired to be unbridled with liberalization, in order to be free from the shackles of poverty and primitivism. For Nehru, the India of 1947, with its villages and bullock carts, was not a picture of the essential joys of life. Rather it was an embodiment of the desolation and backwardness that had led to two hundred years of colonial rule. For Nehru, modernism was a strategic catalyst of growth and change after the experience of colonization. For Le Corbusier on the other hand, Chandigarh was an opportunity to fulfill the unrealized potential of an ideological investment- the resurrection of a dying modernism through an old fantasy. The two men both converged and diverged. Their congruence was obvious. They were modern men of the same persuasion. For Nehru, for instance, Le Corbusier's building in Chandigarh were above cultural identification, he said,

It is wrong to call the new buildings European, these just reflect the changed environments, the industrial age, the new social order and the modern scientific technological advances. It is good that the idea of Chandigarh is spreading. It is good that architects are concerning themselves with the problems of new materials at their disposal and are thinking of such things as light, air water, landscape, civic needs and human beings. (Nehru Quoted from Prakash, 2002:18)

Behind their professed faiths in modernity lay their divergent ideas for the other. An outstanding story, characterizing their similarities and differences is that of the Open Hand monument that Le Corbusier proposed for Chandigarh. Le Corbusier designed the Hand with an elegant and dramatic silhouette, and proposed it as the symbol

of Nehru's modern outlook, his foreign policy i.e., the Non-Aligned Movement. While the modern world is torn between the USA and the USSR, Le Corbusier wrote to Nehru in a letter dated 22 July 1955, that,

the Asiatic East is gathering together... this monument will have far reaching ethical consequences. I am sure that by dressing in this place -the Open Hand India will make a gesture which will corroborate your intervention which is so decisive at the crucial moment of the machinist evolution and its threats. (Le Corbusier quoted from Prakash, 2002:18)

For Le Corbusier, the Hand was a symbol of an everlasting faith that would continue even in the face of opposition. However, the same Hand for Nehru was only a proposed symbol. It took thirty years after the death of both Le Corbusier and Nehru, before the meaning of the Hand was sufficiently diluted that it could be adopted by the Chandigarh administration essentially for its graphic qualities. The record suggests that Nehru's support of Le Corbusier's architecture was fundamentally strategic. In a speech to Indian Institute of Engineers, Nehru stated that he in fact was not fond of all buildings. Nevertheless he said that Chandigarh was an experiment which he welcomed considerably. The modernism that was imported by Nehru was not the same as the modernism that was exported by Le Corbusier. There are at least two modernisms differentially woven into the single textile of Chandigarh. (Prakash 2002:18)

Figure 1: The Open Hand Monument sketched by Le Corbusier



Source: Image clicked by the Researcher on 23rd April, 2013 from Government Museum, Sector 10, Chandigarh;

The above Monument represents openness to 'western science' and 'knowledge'. Nehru wanted that India should welcome and embrace western knowledge. The above image is an original sketch made by Le Corbusier which represents the vision of Nehru. However, it must be known that the monument was never accessible to the citizens and made Le Corbusier's vision remote and distant from the citizens of Chandigarh. The sad irony of Le Corbusier's

monument of the Open Hand, is that it continues to be distant and remote by the inhabitants of Chandigarh as there are many difficulties in visiting the monument. The Secretariat and the Legislative Assembly is guarded by the army, leaving only the Courts open to the public. (Fitting, 2002:79)

Open green Spaces as a Platform for expression:

Corbusier visualised a city space where people could have the joy of open green spaces. His visualisation consisted of an idealism which reflected upon open patches of green land with ample sun and greenery for men, women and children. In his book, *Town Planning of the Three Human Establishments* (1976), he comments on the drudgery of the working lady of the house who has to spend her day in mundane activities. At the same time he brings out the reality of the machinist era where work deprives man from nature. Corbusier therefore, in his plans emphasises on expansive open spaces for landscaping and architectural forms which could bring joy to living. Le Corbusier's vision is implicitly grounded in the industrial civilization. (Fitting 2002) Chandigarh provides an example of Le Corbusier's plan of such a space which gives expression to modern architectural forms. The sprawling open green spaces convey his ideas on urbanism. The sketch below shows his idea of open space in the machinist era.

Figure 2: Open Green Space sketched by Le Corbusier



Source: Le Corbusier, *Three Human Establishments* 1976, Pg 42

'ELITES' AS DECISION MAKERS:

Le Corbusier disliked the crude materialism by which he found himself surrounded. He was faced with the conflict between individual freedom and collective interests in capitalist society. He displayed a firm belief in an elitist meritocracy of artists and technicians. He felt that they should be put in charge of protecting the community from the mean private interests. He could use his advocacy for the responsibility of planning being entrusted to experts with their scientific analysis. But this was in reality only a way of using his own subjective method of working and for justifying the transfer of decision-making control into the hands

of small elite group of individuals like himself (Sarin 1982).

URBANISM AND MECHANIZATION AS A FORM OF 'ART':

Le Corbusier was one who believed that 'urbanism' as a way of life could be planted into a society and people would automatically adapt to such conditions of living. For him urbanism symbolized a modern way of living. He believed that a house is a machine for living in, just like an armchair is a machine for sitting. He was highly impressed by the idea of machines and of course the machinist era. In addition to that he believed that materials such as glass and steel brought revolution in modern construction and architecture. According to him mechanized way of building objects brought great beauty, harmony, order and discipline to the world of art and architecture. For him factory production was an art in itself as there was standardization and calculability, and everything followed the pattern of a number. He wrote,

... More and more buildings and machines are growing up, in which the proportions, the play of their masses and materials used are of such a kind that many of them are real works of art for they are based on -number, that is to say order. Now, the specialized Private persons who make up the world of industry and business and who live, therefore, in this virile atmosphere where indubitably lovely works are created, will tell themselves that they are far removed from any aesthetic activity. They are wrong, for they are among the most active creators of contemporary aesthetics. Neither artist nor businessmen take this into account. It is in general artistic production that the style of an epoch is found and not, as is too often supposed, in certain productions of an ornamental kind, mere superfluities which overload the system of thought which alone furnishes the elements of a style (Le Corbusier 1986:89).

AGAINST 'DIS-ORDER' IN THE INDUSTRIAL CITY:

In the modern or machinist civilization Le Corbusier believed that planning of urban spaces could be based on the unity of the three principles (1) the unity of agricultural exploitation, (2) the linear industrial city and (3) The radio-centric city of exchange. According to him, this classification helps to keep the modern city free from disorder. Le Corbusier was highly critical of the chaos and disorder of the old industrial cities. Through his works and plans he attempted to introduce solutions for the disorder in the industrial city which was laden with chaos due to traffic on the streets and workers colonies which further added to the existing disorder. In his work he particularly criticises the urban model being followed by Paris with respect to its dispersed decentralization of factories. He writes,

Satellite towns and dispersed decentralisation of the factories of Paris can only be a source of traffic conflicts and of waste. Instead of dispersed decentralization, it is necessary to carry out aligned decentralization along circulation and merchandise routes- roads, railways, canals which follow in parallel, the geographical routes. (Le Corbusier 1976:180)

NATURE WITH WORK: THE GREEN FACTORY MODEL

For Corbusier, 'The Green Factory Model' seemed to be ideal to restore the conditions of nature with work. He proposed that the Green Factory should replace the Black factory. For a modern industrial city, Corbusier proposes a model of linear industrial city where both the conditions of industry i.e. the machinist era, could meet the conditions of nature and produce joy of living. He insists that in this model, the conditions of nature are found again. As men-

tioned above, Le Corbusier's work on urbanism gives a reflection of society that is ordered on the model of modern and industrial organization where the nature of work is highly mechanised. Hence, he makes a relation between 'work, man and nature' in his ideology of the modern city. His 'radiant city', 'garden city' or 'radio-concentric city of exchange' proposes a modern plan that functions in harmony with man, work and nature. The 'radiant city' is an ideal city in his analysis. He argues that in such a city there is a fundamental call for nature: sun, space and greenery. He argues that man is not able to appreciate nature and he is excluded from the conditions of nature which takes away the joy of living. In this regard he proposes the green factory model. He insists that the green factory should replace the black factory. He writes,

...this will set up once again the conditions of nature around work. Sun, space, greenery will bring to this area, as to residential quarters, cosmic influences, the response to the pulsations of the lung, the virtue of fresh air, as well as the presence of these natural surroundings which presided over the long and minute elaboration and development of the human being. (Le Corbusier, 1976:120)

Le Corbusier's planning was based on idealism and utopianism. In addition to this he was highly impressed by the Machinist Era and the processes associated with it. His celebration of arts, artifacts and planning were associated with modern day machines such as the steamship, motor-car and airplanes. Le Corbusier writes,

A seriously-minded architect, looking at it as an architect (i.e. a creator of organisms), will find in a steamship his freedom from an age-long but contemptible enslavement to. He will prefer respect for the forces of nature to a lazy

respect for tradition; The steamship is the first stage in the realization of a world organized according to the new spirit.

The airplane is indubitably one of the products of the most intense selection in the range of modern industry. There is a new spirit: it is a spirit of construction and of synthesis guided by a clear conception. Whatever maybe thought of it, it animates to-day the greater part of human activity. (Le Corbusier 1986:103)

CONCLUSION:

Mumford (1934) in his book 'Technics and Civilization' criticizes the modern industrial processes and the dominating role played by mechanization and regimentation. He is highly critical of Le Corbusier's modern values associated with machine age such as discipline, harmony, order and beauty. Mumford shows how such values dominated every aspect of modern human existence through reorientation of human wishes, habits, ideals and goals. He wrote ferociously against such values of standardization associated with the machinist era. For Le Corbusier standardization represented discipline and order. Lewis Mumford work provides a good critique to Le Corbusier's plans. He was horrified by Le Corbusier's worship for Science and technology. He writes,

Le Corbusier is an elitist technocrat, an authoritarian classicist, a sociologically naive formalist with his grand design, his Cartesian elegance but also- alas! - with his Baroque insensitiveness to time, change, organic adaptation, functional fitness, ecological complexity. (Fishman, 1977: 259)

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