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POPULATING ARCHITECTURE WITH COMMUNITY: THE SYMBOLIC INTEGRATION OF STARK CONCRETE WITH EVERYDAY LIFE IN CHANDIGARH, INDIA

Introduction: Chandigarh as a Key Symbol

A city is built by creating and organizing space. To create this space others who had already imagined this space as a part of their lives must be removed. Then, one has to recreate this space closer to the heart's desire, to reformulate it in the context of one's worldview and vision, so that it might become a city of the future. Still later, the nitty-gritty of the everyday work of creation of various structures needs to be done, where the unusual and the everyday will meet and hopefully cohabit. Eventually, the city will be opened to those who would live in it. These people will then come in to live in a world which is already created, into prefabricated spaces. Did the architecture of Chandigarh create a successful environment where everyday life was not only possible, it made the people recreate the area into a more symbolically meaningful cultural area?

When Chandigarh was first built, it was already part of a philosophical and ideological background. The first Prime Minister of India, Pandit Jawaharlal Nehru wanted to build it in order to infuse new ideas into Indian society. Le Corbusier, who was eventually the architect of this showcase for a new India, wanted to build it because it was part of his philosophy, which saw the essential bare concrete as an art form and the city as a construct that was also aesthetically pleasing.

This idea, that the structure of the town itself could serve many functions, is not new. However, the form and content of this pattern-creation was quite different. For the first time, instead of following what was 'traditional' and 'old', new ideas were incorporated to build up a town from scratch.

As we shall see, the structure of Chandigarh became an important idea. It became a symbol of many things, thus qualifying as a key symbol (after Ortner; 1973). However, at the risk of being a reified entity, this imposed vision then continues to take on a life of its own. It becomes a ritual that is

enacted without understanding the logic or meaning of its existence. It is at this juncture, where facts, symbol and aesthetics intertwine to attempt to reformulate itself, is the conjuncture of an anthropology of an urban aesthetics. This is where we would like to begin our account of Chandigarh.

This paper begins by trying to put together the background of the structure of Chandigarh as not only a lived reality but also as an aesthetic philosophy as visualized by its founders. Then, we look at the lived reality of Chandigarh today and its existence in the hearts, minds and actions as an aesthetic backdrop to the everyday life of those who live within it. Then, we look at how these aesthetic backgrounds contest with each other for a new identity that may emerge in the future.

Structuring Chandigarh as Aesthetics

The reason for building a new capital city for Punjab became important since it had been divided into two parts after the Partition, and one part with its original capital remained in Pakistan. In 1950, the New York architectural firm of Mayer, Whittles and Glass was given the contract for the master plan of Chandigarh. Matthew Nowicki was also invited to join the staff to plan out Chandigarh and was supposed to have architectural control. Mayer was trying to create something that he had already tried out in a limited way, creating green belt towns and hills. Basically he was trying to create a beautiful city with a fan-shaped outline which spread gently, filling the space between two river beds. The local government buildings were located at the upper edge of the city within a fork of one of the rivers. The central business district (CBD) occupied an area near the centre with a curving network of roads surrounding residential areas (superblocks), each containing central park areas. Two larger parks were created that stretched through the city. Since the site was flat it allowed some freedom in creating street layouts and the overall pattern avoided geometric grids in favour of a loosely curving system. However, Nowicki died, leading to the selection of a new architect for Chandigarh and the name of Le Corbusier was suggested by the Minister for Planning. He also suggested the name of Pierre Jeanneret as a good person for details.

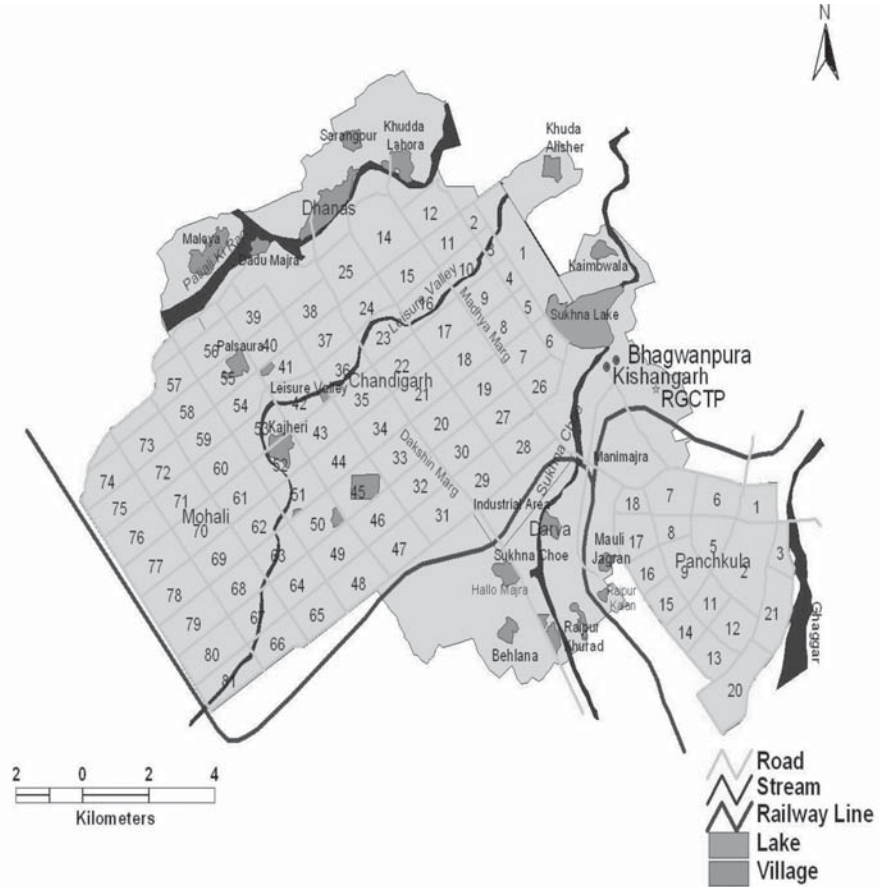
The Prime Minister of India, Jawaharlal Nehru and the Punjab Government approached Le Corbusier to do this job. It was meant to become a very new experiment in modern city life. Others involved in this work included Maxwell Fry, Jane Drew and Pierre Jeanneret. Le Corbusier took charge of this project in 1951. The Governors C.M. Trivedi and C.P.N. Singh also collaborated as did planners and architects like E.U. Chowdhury, J.S. Dethé, N.S. Lamba, J. Malhotra, B.P. Mathur, P. Mody, M.N. Sharma and A.R. Prabhawalkar.

Le Corbusier started a system of self-supporting neighbourhood units which he called sector. Each sector was introverted in character and

communicated with other sectors at only four junctions. All houses opened towards the inside and a grid plan was created to make the routes and sectors easy to comprehend. The roads were planned into seven kinds numbered V1 through to V7. V1 connected Chandigarh to other cities. V2 involved the major avenues of the city like Madhya Marg, etc. V3 were corridor streets for vehicular traffic only. V4 through to V7 were roads found within sectors. Chandigarh was planned on such scientific principles and it was meant to be transferred 'culturally' to future generations.

Three basic principles were used by Le Corbusier to design Chandigarh. The first was the principle of money since India had a heritage of treasures from the past but had no money. Hence, grandeur was compromised for economic reasons. Each building was thus designed according to the budget before being put into the project. The technology itself created limitations as a second principle but good quality clay, stone and sand as well as human labour were readily available in quantity from the area. Thus, Chandigarh was built with rough concrete and locally produced brick. The third constraint or principle was that of the hot climate. Thus, there was a need for the architecture to give shade, for the flow of air into the buildings as well as to control hydraulics.

Earlier, in India, different castes did not use to live together nor did they interact together. Le Corbusier used democratic principles in this new city giving equal care to the housing of all classes of society in order to seek new groupings, new patterns of education and public welfare. This was made possible by the new ideas of industrial growth, piped water, electricity and cheap transport. Hence, each sector was designated by a unique number, with the Capitol Complex being housed in Sector 1 and also within the boundaries of Sector 3 extended to its full dimensions, and the other sectors numbered consecutively from the northern corner of the city. Initially there were 30 sectors in the city, with 24 of them being residential. The sectors at the northern edge of the city are smaller. Concrete or brick slats are built across many open fronts of buildings to keep down the expense of glazing as well as to keep out the sun. Flat roofs were constructed throughout Chandigarh since it could also be used as a sleeping area. In all sectors, 70% of the buildings would be for private individuals. The residential lots range from 75 sq. yards to 5,000 sq. yards. Small windows were the norm. Each sector was designed to be half a mile by three-fourths of a mile (800 metres by 1200 metres). On each side the roads would be allocated to fast transport and these roads would have no access to the houses. Such sectors would cater to 5,000 to 25,000 inhabitants. They would also have a longitudinally oriented green strip through its centre orientation towards the mountains and closed to traffic. This strip would have recreational areas like schools, sports, walks, etc (see map). Also, no personal statues were to be erected in the city.



MAP OF CHANDIGARH SHOWING SECTORS, ROADS AND OTHER FEATURES

Le Corbusier created the general outlines of the master plan and the creation of the monumental buildings as well as the Capitol Complex, Housing, Museum, City Plaza, among others. Pierre Jeanerette, Maxwell Fry and Jane Drew developed the neighbouring sectors, schools, shopping markets and government housing tracts. Thirteen categories of housing were specified, each corresponding to a level of employment of a government official. Including the areas of Mani Majra and Burail, Chandigarh is spread over an area of 114 sq. kms. The development of Chandigarh influenced similar growth patterns in areas related to architecture and urban planning (see map).

The Capitol Complex was of great symbolic significance, based on the design of a great cross axis. At the right of the complex is the parliament and to its left is the secretariat. In the foreground of this is the pool of the palace

of justice. Missing from the scene is the Tower of Shadows planned by Le Corbusier. Also, the artificial hills created in the area were not part of Le Corbusier's original plans. The secretariat building is built on a horizontal platform with the provincial assembly hall on its roof in the form of a parabolic arch. The platform has been symbolically likened to the plains on which Chandigarh is located while the parabolic arch is likened to the surrounding hills. This is so since it is at the foot of the Shivalik Hills next to an artificial lake. The Capitol Complex is an interlinked array of sun blockers. Initially, the Governor's palace was also supposed to be located here but this was abandoned. This area was not given much scope for expansion. Also, initially, the area was designed as a large pedestrian plaza, separating motor traffic from pedestrians and sunken trenches leading to parking areas.

The secretariat building was initially a tall thin slab with a surface divided by a central horizontal band. This was the longest building within the city, being 254 m long, 42 m high and it had ministerial offices in the centre with offices for employees on either side. It was completed in 1958. It has six eight-storey blocks separated by expansion joints. The central pavilion, which is the fourth block, houses the offices of the ministers. The two main facades are fenestrated using rough concrete, creating more than 2,000 units of design. The road to the building is below the ground level to a large parking area in front of the central block. The floor is left open at this level for an entrance hall. Blocks 1 and 2 rise directly from the ground while blocks 3, 4 and 5 face the excavated area of the parking lot. They have the lower storey open. Part of Block 5 and Block 6 go on to the level of the plaza, while the lower part of these blocks open to the level of two storeys. The top of the building has been developed as a roof garden containing service blocks. It also has a cafeteria. There are free standing exterior ramps enclosed in rough concrete walls. Each of the six blocks also has interior stairways and some elevators, while central corridors connect the rooms. For the ministers, there are thicker columns and larger bay areas.

The high court was supposed to be an imposing building which was built in spite of the fact that the labour force was unused to modern building methods and the materials were poor in quality. A double roof structure was created where the upper roof cantilevered out of the office block like an umbrella shading the lower roof. The space between these two roofs was left open to enable currents of air to flow through them to the flat roof of the office block and the flat underside of the umbrella/parasol sloping towards the centre in the form of rows of arches. An abbreviated L shape was created with a long façade facing the capitol plaza, containing rooms for courts.

The building was rectilinear and the eight courts were identically seen in the main façade separated from the larger high court by a monumental columned entrance which rose to the height of the building to a height of sixty feet to meet the outwardly thrust roof. The building rises straight from ground level to a full height concrete *brise soleil*. Only the underside of the umbrella-

like roof has arches. The deep fixed concrete *brise soleil* gives a scale-less pattern to the structure, giving the structure its unity. Behind this concrete screen the court rooms have glass windows within which there are narrow vertical spaces containing shutters which open and close on hinges. The main façade faces north-west, thus receiving no direct sunlight. This rough concrete has been treated in a variety of ways and much of it is covered with sheet metal. Parts of the interior and some of the ramps have wooden boards inserted within the metal to give the concrete some impressions of their jointed forms. Other surfaces like the entrance columns are finished with gunnite cement. These pillars and the portico walls are also coloured, the central pillar painted yellow, the adjacent one painted green and the wall to the left to be painted black, while the right hand pillar was painted red, finishing the remaining portico wall in blue. There is a concrete finished ramp and the entrance lobby has been paved with white flagstones set in rows of varying width. It was found that the entrance hall of the high court was unprotected and the horizontal circulation of open corridors at the rear was also not sheltered properly during the monsoon rains.

The Assembly Hall was seen as a rectilinear structure, square in plan with a monumental portico facing the main plaza. Both the portico and the office block had solid end walls on the lateral facades. The large chamber was in the form of a hyperbolic cooling tower with an average thickness of 15 cms. The smaller council chamber was rectilinear while the upper portion of the tower extended above the roof line. The assembly chamber was 128 feet in diameter at its base and rose to 124 feet at its highest point, forming a tower designed to ensure natural light, ventilation and good acoustics. The assembly hall was most intricately planned of all the buildings. Individual entrances, stairways, lifts and ramps ensure complete segregation and separate circulation of all the groups. Separate galleries existed for men and women in the council chamber.

Sector 17 was the City Centre of Chandigarh. It consisted of different squares strung together by broad avenues. Since this centre lacks enough vegetation, in open sunlight it can be quite unpleasantly hot. It is not residential but in the daytime its numerous shops, markets, restaurants, cafes, banks and department stores make it come alive. For some, it is still an experiment in the making. Urban circulation here is unusual since there are wide open spaces instead of the usual 'oriental' idea of shadowy narrow streets full of crowds and noise. A large open surface along the facades as an anti-glare protection was a standard feature.

Sukhna Lake was a natural lake created by damming one of the two rivers flowing beside it. At the north of the Capitol no other structures were to be built in order that the view of the Himalayas from the windows was not impeded, an instruction specifically given by Le Corbusier. However, the club house at Sukhna Lake was found to be necessary and Le Corbusier designed

it lying three metres below the level of the road so that it was barely visible from the promenade. Chandigarh was surrounded by the rivers Patiali and Manimajra, both of which carried water only in the monsoon season. At other times of the year they are dry and in the driest months of May and June cause large amounts of dust to blow into the city areas. Hence, trees and shrubs were planted along these rivers to prevent this river sand from blowing into the city. One of these rivers was eventually dammed in 1955 and the water boulevard was extended to become a causeway or dam with its retaining wall being 20 metres high, 4 kilometres long and 24 metres in width. This latter width created a promenade. The causeway was a reinforced concrete construction which was simple and plain and its severe lines harmonized entirely with the natural setting. Also, the artificial lake created by the dam modified the climate of the city itself.

Le Corbusier and his 'Machines': Re-structuring the idea of Chandigarh

Charles-Edouard Jeanneret was born on 6 October 1887 in La Chaux-de-Fonds, Switzerland, to family of well-known match-makers. He began by being known as a painter and an architectural critic. He took up a pseudonym, calling himself Le Corbusier after a while, meaning "the crow-like one". He became a famed leader of 'modernist architecture' and a founding member of the *Congres International d'Architecture Moderne* (CIAM). He is perhaps best-known for his philosophy, sometimes encapsulated by the statement that the "house is a machine to live in". He attempted all his life in experimenting with architectures and technologies that promoted the creation of such a house. His entire life and the philosophy behind his work was often enmeshed in controversy. However, his work influenced many others to emulate it, especially after World War II. Many of his plans have been criticized and many claim that they are now outdated. The effect of the implementation of these plans has also been studied by many. However, one important aspect of the work of Le Corbusier is the kind of social order that he wished to create through such architecture.

In his work, Le Corbusier had been influenced by many. Some claim that his sojourn in Switzerland till he permanently moved to Paris at the age of 31 years was responsible for his obsession with order and uniformity. He was also influenced by Parker and Unwin's attempt to create the Garden City as appropriate architecture for creating a cooperative civilization. During the industrial age, many areas in the countryside became stagnant while cities grew without control. This created miserable conditions for the working class. Hence, though the industrial age had its problems, it had advantages in having new technologies.

Le Corbusier was fascinated by the new emerging technologies, especially after being introduced to 'technological rationalism' by the engineer August Penret. He wished to use these technologies to create an utopian city.

He was thus biased in the use of only those technologies that suited the social order that he wished to emerge in his cities. He was so idealistic since he refused to concern himself with property rights or exacting profits from the land. Socialists believed that such theories, which paid scant regard to past social orders and land rights, only perpetuated the social inequalities already existing in society. In the 1920s, he visited the Soviet Union, since he found similar ideas there. However, he found the people to be too authoritarian and he rejected their models. The Soviets later rejected all forms of modernism but later, under Khrushchev, this form of architecture returned to the Soviet Union.

In 1914, Le Corbusier created a mass-produced house based on a standard concrete form to help in the reconstruction work after World War I. This was called the Domino house. Variations could be brought to the house through position and placement by planners. The next plan he came up with was titled *A Contemporary City of Three Million Inhabitants*. It was to be modern, without taking into account any old relic from the past. It would help in creating a community and create order. It was designed around the issue of function, efficiency and production. Parts of the city were segregated according to the classes residing there. The social elite or the 400,000 to 600,000 people would live in 24 identical skyscrapers made of glass and steel and extending to 60 storeys. These building occupied only 15% of the land while 85% of the land was devoted to parks and gardens. Le Corbusier visualized skyscrapers as being a 'vertical street' which was densely populated but did not have the soullessness of the dense areas of the city. Services to this area would be done collectively since the elite would not be doing cooking, shopping or cleaning. In such a scenario, the working class became part of the satellite cities, living away from this central area, in buildings which were more ordinary, based on low-rise apartments with courtyards and 45% of the space left open. Both were however mass produced and could use the same kind of mass produced furniture.

In 1925, he created the Plan Voisin which consisted of 18 uniform skyscrapers to be built in Paris, to the north of the River Seine. This would necessitate the mass demolition of the old areas. This was a logical continuation of the work of Baron Hausmann which would create a Paris resplendent with skyscrapers and automobiles. This plan was his most criticized and there was much outrage at the idea that these old areas were to be demolished. In spite of the huge cost of resumptions of the land, it was still supposed that the project would be profitable. Even though much area would have parks and gardens, there would be five times more office space than in the old business district. He created a group of bankers and elites to buy up the land that he required for building. He could never get enough support to be able to do it, since it was criticized for its inhuman scale, large empty spaces and for eliminating the old close streets which had a very rich and varied public life.

This experience made him disillusioned with the elite and with capitalism. The frustration caused by property rights and the greed of the

landlords was one of the reasons that the city could not perform efficiently. Secondly, he saw in the 1929 stock market crash that capitalism was too chaotic to create a good social order. Hence, the idea of the *Contemporary City*, with the separation of the classes, was lost in his new plan. His new idea was that of a Radiant City which had high-rise apartments called Les Unité, which would house 2,700 residents each, who would belong to all classes. Even apartment sizes would be based on requirements rather than on wealth. This would ensure that dwelling sizes would not reflect status. Here, the residential district did not reflect production as in the *Contemporary City*. Shared facilities would also ensure commonality, with workshops for producing handicrafts, common meeting rooms for activities that were not possible at the workplace. Each tower would have its own cafes, restaurants, shops, gymnasiums, tennis courts and swimming pools. The towers would occupy 15% of the land, as before. He was creating a social revolution through architecture since men as well as women would work, cook, clean and raise their children. The services available were collectively provided as a reward for eight hours of work conducted by the people. Such housing would only be meaningful after a social revolution had already taken place. As a result, Le Corbusier was not concerned with muggings in the parks or vandalism since crime was non-existent in the Radiant City. Recent biographies based on his letters also show Le Corbusier to be a Nazi sympathizer with strong Fascist tendencies (AP, 2010).

In 1955, Britain cleared up many of its slum areas and promoted high-rise complexes of five storeys or more, due to unprecedented growth of population. Such high-rise apartments had been plagued by crime and other social problems, especially where classes prone to such problems stayed in such areas. After World War II, Berlin had been destroyed by about half and thus major reconstructions were required. Modernist enterprises with different architects were attempted in 1957. In 1958, when he started work, he found that so much had been destroyed that the problem of buying up and acquiring land was not required. Using his Plan Voisin, he started designing Hauptstadt Berlin, as a design competition for a reunified Berlin. He neither won the award and the plans were shelved because the Berlin Wall was built in 1961. In Marseilles, Le Corbusier's Les Unité middle-class residents were proud of being part of the project, unlike the kind of public housing found in Britain. Of course, the rich could easily live in high density areas much better than the poor because they could pay for the services more easily in order to make the area cleaner and more livable. Such high rises also created problems for children and the existence of parks rather than streets led children, some believed, into more anti-social behaviour since their guardians could not watch over them.

For Le Corbusier, the five major points of his architecture included the *pilotis* as the central element with roof gardens, free plan, free façade and ribbon windows as being evolved from the first central point. To have gardens around the *pilotis* was great but an added feature was to use the roof for a

garden. Such a garden would enable the air to be clean, the noise to be smothered and the street and other views to be distant. It would thus be a way of sheltering people from the sun and the rain. They could be adjusted to suit different climates, sites or living patterns. They also allowed the maximum ventilation and light. His ribbon windows maximized the optimism of light and view. Thus, for him, "Man is a product of nature. He has been created according to the laws of nature. If he is sufficiently aware of those laws, if he obeys them and harmonies his life with the perpetual flux of nature, then he will obtain a conscious sensation of harmony that will be beneficial to him" (Le Corbusier, 1967 in Hui, 2005).

The Assembly in the Capitol Complex has a portico facing South-East with a upward swooping curvilinear U-shaped parasol which not only is an umbrella and a gutter but also symbolized the horns of a cattle or bull. He saw it as a form of Nandi, the bull venerated as a vehicle of Shiva. He thus felt that Indians lived 'under the sign of the bull'. The traditional parasol shape was an idea from Fatehpur Sikri. On both sides, the enameled doorway in the middle has images like the movement of the sun, animals gathering around the symbolic Indian tree, man and his relationship to life, nature and the cosmos as well as growth and harmony. Through such metaphors Le Corbusier attempted to link up to the Indian way of life. The structures that form the main body of the Assembly symbolize the respect to the sun and the cosmos. The portico of the building was also meant to resemble a section of an aqueduct resting on its supports, while the hyperbolic assembly chamber reflected the shape of an industrial cooling tower. The indirect light shadowing on the mushroom columns even as it cools reminds people of the spaces of a mosque. Le Corbusier's sketches show how he obtained ideas for all of these from the seventeenth Pinjore garden near Chandigarh as well as Hindu and Jain temples, a factory and old courtyards in Ahmedabad, the Viceroy's moghul gardens in Lutyens' Delhi, the Gateway of India in Mumbai from 1911, Rajasthan villages near Jaipur and a water tower near Ambala. These images were used to understand how vernacular architecture dealt with heat, the monsoons and other climatic features. The parabolic structure was to him like a cooling tower he saw in Ahmedabad which could take away the heat by using the sun to create a draft. The ray of light from the tower reminded him of the Hagia Sophia, which would hit a symbol of Emperor Ashoka on the annual opening of the Parliament. Thus, this feature would also circulate air and create cross-ventilation drafts. He also used elements from the solar observatory or Jantar Mantar from Delhi built in 1719 on the roof. He reduced their size to make them symbolic rather than actual. The *brise soleil* was based on the wooden *mashrabiya* of Arab buildings the brick-louvered *claustra* of Morocco. They provided shading, created ventilation and reduced the glare. They were also symbolically linked to the worship of the sun. However, eventually, the use of concrete rather than wood made them much less effective (Hui, 2005; Ali, 2006).

In June 2013, the Museum of Modern Art in New York held one of the largest exhibitions on the work of 'Le Corbusier: An Atlas of Modern Landscapes' on his 125th birth anniversary. One of the things that they focused on was some of the incomplete designs of Le Corbusier. This included the Governor's Palace and the Museum of Knowledge which were to be built in the Capitol Complex, among others. The Governor's Palace was supposed to be a sublime example of the best elements of his architecture which would have given the Capitol Complex a new dimension. Many other architects also felt that this required to be completed (Wattas, 2013).

Soon after Le Corbusier reached India in 1951, he was invited to Ahmedabad where he built four buildings. These included the new Museum and Cultural Centre requested by the mayor, the Mill Owners' Association Building, the monumental building for Shodhan and a residential house for Mrs. Manorama Sarabhai. As in Chandigarh, he used solutions that he had used in Algeria, Tunisia and South America adapting them to 'lessons that were already well-tried in Indian traditions of building' (Curtis, 2006: 203).

Brasilia was another city which has often been linked to Le Corbusier, since it was built on the principles of CIAM. CIAM's Athens Charter included Corbusier's *Contemporary City* as well as *Radiant City* as prototypes for ideal cities. Like Le Corbusier's works, Brasilia featured houses of uniform height, scale and appearance separated as residential superblocs with gardens and other facilities, freeways crossing through the city on both axes with administrative, business and financial towers built around the centre where the freeways meet with the recreation areas surrounding the city. Brasilia also attempted to create a new social order through its architecture, but it failed to create classlessness since servants in these high rises were worse off than before and their separation from other classes was more. Brasilia had limited street life and casual interactions were not possible since residents were moving more on vehicles than on foot.

Rethinking the idea of Chandigarh

Chandigarh can thus be seen as a conglomeration of ideas that its founders like Jawaharlal Nehru imagined and the ideas developed by Le Corbusier through his experiences in the past. He created a segregated city which many claimed took no notice of the Indian climate or culture. Others claimed that people moved into areas like Chandigarh because they were forced to move out of other neighbourhoods. It was also supported by extortionate landlords and easy finance given by banks and governments for such projects. Further, in some kinds of such housing, it was noticed that many high rises were occupied only by single parent families who required social services. The common facilities in these areas did not help them to unite since they identified less with their residences. With this situation, the housing decayed, went into disrepair, with high vacancy rates and

many social problems that led to such housing being torn down after about a decade.

Le Corbusier mostly recommended the removal of streets which he detested, replacing them with parks and freeways. It was often the fact that city life began and ended on the streets. Large modernist enterprises have often ignored the importance of the street in reproducing and maintaining community ties. Some of his critics also stated that Le Corbusier was not even creating a city. Le Corbusier's Vertical Garden City was only a suburb arranged vertically since isolated high rise buildings with uncultivated open areas could only be interpreted in such a manner.

From the 1960s, discontent regarding the modernist cities has grown, calling this post-war reconstruction as being a 'second deconstruction' since such constructions required the government to raze buildings and areas that had survived the war. Much effort has since been undertaken to correct the works and mistakes of the modernists. Today, such modernist projects are being replicated all over the world. They solved housing shortages in many areas.

Right from the beginning, the myths of its starting date vary, from the date given by the Chandigarh administration, 1948, as the date the decision first taken to construct the capital Chandigarh, to a rainy day in 1950 when the District Magistrate, the Superintendent of Police of Ambala and K.L. Kapoor, the resident engineer took over Chandigarh (they entered from the chow on the Mani Majra side after the flood on a motor grader on the old Chandigarh Ropar road), thus ending the agitation of the local people to stop the takeover, to the visit of Jawaharlal Nehru to village Nagla on 2 April 1952, where he stood up on a tower constructed for the purpose to look over the land where Chandigarh was to be built, to its official shift of the capital from Shimla to Chandigarh on 21 September 1953, to its inauguration by Dr. Rajendra Prasad as the President of India on 7 October 1953 (Sharma, *et al.*, 1999).

Nehru had wanted it to be a future-looking modern town. He said, "let this be a new town, symbolic of freedom of India, unfettered by the traditions of the past ... an expression of the nation's faith in the future". However, Nehru's acceptance of this modernity was not uncritical, as we see from the following part of a speech given by him on 17 March 1959:

I have welcomed greatly one experiment in India, Chandigarh. Many people argue about it, some like it, and some dislike it. It is the biggest example in India of experimental architecture. It hits you on the head, and makes you think. You may squirm at the impact but it has made you think and imbibe new ideas, and the one thing which India requires in many fields is being hit on the head so that it may think. I do not like every building in Chandigarh. I like some of them very much. I like the general conception of the town very much but, above all, I like the creative approach, not being tied down to what has been done by our forefathers but thinking in new terms, of light and air and ground and water and human beings.

It was felt by Pierre Jeanneret that the architecture of the town was very daring and it would require much daring for a new group of citizens to live within the city. However, after some decades, Chandigarh became such a haven not only for government officials of Chandigarh, Haryana and Punjab as well as others, it was also a good place for many to retire after a lifetime of work. Thus, the town became one that became labeled as being one for the 'tired, retired and the expired'.

It is a matter still being debated regarding whether Chandigarh was an example of a leftover colonial programme, where technologies and lives were borrowed from the First World powers and then pushed into the country for the people to adapt as best as they could, or whether it was a truly forward-looking revolutionary method to push India into a more modern and competitive age. It has often been said that the architects ignored local climatic conditions and locally evolved architecture that met the needs of coping with this kind of extreme climatic conditions. Thus the distance of the residences from industries and offices and other such issues were decided on the basis of the preferences of their Western counterparts. Even up to the nineties this lack showed up in the fact that the city had traffic jams even during lunchtime, because many people would rush home at lunch, eat, rest for ten to fifteen minutes, before rushing back to office. As the city has spread out and people became acclimatized to living further distances from their place of work, this tendency has decreased.

When Chandigarh was being built, 22 villages and 20,000 people were affected. Studies show that few of the local villagers affected could cope with the middle class urban ethos of the city. Also, many of those who settled seem to have had a selective loss of memory regarding the protests involving the taking over of the land. The first phase of these protests was from the spring of 1948 to about 1950 when the actual possession of the land began, and alternative land was given. This part involved people protesting against the takeover, their control using police forces and the giving of land as compensation. The second phase continued through the 1950s, though it was sporadic in character. It involved many who took compensation but refused to let go of their lands. They continued this until legitimate dues were paid to them or they were pushed out. The third phase continued through the 1960s and 1970s, where a more aware group of people fought to get a better deal for themselves. Here, people launched protest movements and also went to the courts. As a result of the agitations not much work could be done between 1948 and 1950. Also, various political parties joined the fray, and contestants wanted it closer to their own arena to get a share of the profits, failing which they claimed that it was a mark of bias of the Central Congress government towards certain individuals. An anti-Rajdhani committee materialized to fight against the central government (Sharma, *et al.*, 1999).

However, it was also a fact that some of the same people that fought to save their villages from being taken over, fought to ensure that Chandigarh

was not handed over to Punjab. A high number of Chandigarh residents is also not from local inhabitants but those who came in later as migrants for work. From 1976 onwards, it has also been noted that there has been increased spending by the population of Chandigarh and thus a very high, perhaps one of the highest, standards of living in India. Yet, they paid less than other cities for food, clothing and some other items in 1997 (Sharma, *et al.*; 1999).

Over the years, many people have attempted to create a newer plan of houses that they occupy to suit their own needs. At present, the Chandigarh by-laws plan on no increase in the floor area ratio (FAR) in near future. A higher FAR would mean more space and certainly more rooms. In some houses, an increase had been allowed to create permanent kitchens on top floors and so on in 2008. This has now been criticized since this increased FAR has led to extra rooms, more tenants, and thus more space being required for vehicles and other kinds of pressure on the town, originally planned for half a million individuals. In the new sectors like 48 to 56 and parts of 61 and 63, the FAR has been fixed at 1.5 with a density of 250 persons per acre to ensure uniformity (Mohan and TNN, 2011).

In India, FAR is also called FSI (Floor Space Index) or FSR (Floor Space Ratio). It has been used by analysts to show how cities may be made denser for optimal use of facilities and shorter public transport distances. This kind of building control ensures an optimal head-count so that they meet with the existing infrastructure of the city. FSI also controls optimal community relations. However, the World Bank has been claiming that congested cities like Mumbai and Delhi are also not using their empty spaces efficiently enough. They believe this hampers economic growth. Their data shows that Mumbai has a FAR of 1.33, Chennai of 1.5 and Delhi of 1.2 to 3.5. In comparison, Chicago has a FAR of 12, New York 15 and Tokyo 20. However, this analysis does not factor in the fact that there are major economic discrepancies within the city that are not addressed by this issue. This will affect street and indoor crowding ratios. According to Patel (2013(a)), this may be remedied by modifying the Rent Act, creating inclusionary housing and also free housing, something which Chandigarh has not even thought of.

Such a model, called the monocentric-city model, ignores the fact that city spaces are not just for residences, offices and transportation but also for schools, open spaces, playgrounds and other kinds of recreation and public amenities. This ignores the fact that each sector or area in the city has some businesses. Thus the CBD or Central Business District, unlike Chicago and some other places, is diffuse rather than localized. Transit times also change the character of the city. Comfortable densities are preferred by people rather than too high or too low ones. At times, specific localities become preferred. Recent studies also showed that urban densities decreased at about two percent per year in 75 of 88 cities in the developing world, and all the 32 cities studied in the developed world between 1990 and 2000 (Patel; 2013(b)).

One may thus see the imposed vision of Chandigarh through a centrally planned and funded development (often called top-down) as being a kind of a *key symbol*, which has multiple sets of meanings for different people. For those who had planned it, it was a structure that would become a template for the modernistic future India, linking up new architectures and ideas from around the world and creating a new kind of society as a disjuncture from its somewhat insular (as visualized) past. For the architects involved, it was a new philosophy that was to be imposed on the existing topography, with a new population to be inserted within the architecture to live out this new philosophy. After these somewhat clearer lines of ideas, the symbols explode out into as many ideas as there are people who inhabit this town, or rule over it.

The existing key symbols of the importance of Chandigarh were taken up as being crucial for the governments of both Haryana and Punjab, if not Chandigarh itself. Contesting claims for 'taking over' the town are still being made, as late as March 2012. The 'prestige' value of being in Chandigarh has been seen as important for government officials working in North India as being immediately after Delhi. Hence, posting in Chandigarh is seen as very important for one's career. Retiring with a house in Chandigarh is seen as 'having made it'. This practice is also followed by those who have done well in business in this area. Also, many Non-Resident Indians from North India who have made it big abroad prefer to buy houses within Chandigarh. Many such houses dot the affluent portions of the city. This practice has also hyped property prices in the region, thus making realty here one of the costliest. Thus, living within Chandigarh has imbued within the people an identity of its own.

This kind of development is in tune with what is happening in the rest of Punjab. Punjab had 11.52 lakh slum dwellers in 28 towns in 2001. The Rent Control Act and the hyped realty industry has ensured that the poor have no proper housing. It is a direct consequence of these that illegal colonies and encroachment of government lands has taken place. Many owners fear to lend out land or even rooms for fear that they might get taken over by the tenants. Punjab has a shortage of 1,438,800 houses as per the 2011 Census (Sharma and TNN, 2011).

It is in this context that one has to see the different consumerist lifestyle within the city. It is a practice within the majority of the people residing here to own two-wheelers or cars. For the more affluent, this translates into a house with multiple vehicles spilling out onto the sidewalks and streets. Parking within the city, especially for events and markets, is a major problem. Overall, the city has one of the highest vehicle densities of any region in India. Public transport is looked down upon. Since those who plan for public transport do not use it, the planning of such public transport is often unsuitable for those who actually use it. The identity of those living in Chandigarh has become synonymous with personal vehicles, the bigger the better. As a result of this

identity, the cycle tracks are often left uncared for, with large potholes and dark, dangerous trees in their midst. Those with vehicles seldom think of these tracks as being very important. In 1978, there were 130,000 bicycles in the city. In 2001, 68% of the households used bicycles. In 2011, the number of bicycles went down to 57%, while the number of vehicles increased from 15.4% to 25.7%. It is perhaps on these issues that the city has been classed as Number 1 in the Human Development Index for India. Also it has been classed as the wealthiest town in India. In terms of its family wealth it is classed as Number 6 in India. However, for a city initially designed for fewer people, by 1997, it exceeded the calculated population of half a million by 200,000, with most of its population living in slums (see Table 1).

In fact, different sectors of the city have been developed so unevenly that they have resulted in the creation of a social stratification, so much so that people know by the sector number of their residence whether the person is from a high status or not. In some sectors there is a high concentration of public sectors while in others which are more densely populated these services are much less. The population in the sectors is not uniformly distributed and planning policy has been towards making apartments. This is also demonstrated in the way the metro rail services have been demarcated for future implementation. Every tenth person here is living in slums, something which has become a permanent part of the city (see Table 4). This is no surprise since the services of those residing in these slums are required by the other residents of the city. In spite of this, these service providers do not have access to cheap housing or even adequate salaries to afford the expensive housing or rentals within the city. Thus, many costly services run from these slum areas. Though there has been some attempt to remove, rehabilitate or to put these slums in different zones farther away, they are still very much the basis of the city's survival.

Due to the greed for revenue among those in power, there has been uncontrolled growth of commercial activity on designated green and open spaces. This has helped to create urban villages within the city which has become a dominating feature of its social and physical fabric. Sub-standard development in the periphery of Chandigarh has added to these problems. Also, industrial expansion in a blind manner has added to the pressures on the services and the infrastructure, including inadequate public transport, traffic jams due to population increase and pollution (Malik, 2003; Rajbala, 2011).

The Capitol Complex (including the Assembly, Secretariat and High Court) was found in one survey in August 1996 to have a good climate-conscious design for the hot, tropical climate of Chandigarh. This included the environmental performance in terms of design, materials, construction, orientation, detailing and landscape. However, it becomes clear that though the Secretariat was built to withstand high temperatures poor space-use and congestion has led to the lack of flow of air leading to poor ventilation in the

building. The High Court building with its double roof performed best while the Assembly building was able to maintain a constant temperature throughout the year. There was much disparity in demand and supply of land resulting in violation of building controls and density regulations. The nexus between builders, contractors, politicians, developers and slum-dwellers resulted in fewer land plots being sold, sometimes to fictitious or non-serious bidders at auctions, with the intent to raise prices of land and property (Malik, 2003).

At present, 9,252 persons live per square kilometer in Chandigarh (Tribune News Service; 2013: 3), something commented by Trip Advisor's Cities Survey recently. In 1978, Mathur and Madgwick had conducted a survey to show that the planning and architecture of Chandigarh had not fitted well with the local traditions. The parks which were planned had not been maintained well and due to lack of water had become dust bowls in the hot dry zone. The over-sized road network was geared for the wealthy and their predilection for costly and large vehicles while bicycles and pedestrians were those who were least thought about. The segregated land-use policies were also suited to big businesses but were seen to be of lesser use to street vendors and small businesses which are often a part of small city life in India. This pattern of formation of cities was replicated without critical thought to other areas also. Local people have manipulated Chandigarh as a symbol and as an idea of being a compromise between the crowded city of Calcutta (Kolkata) and of a 'City of the Future' (Malik, 2003).

Rail India Technical and Economic Services (RITES) conducted a recent survey in Chandigarh to show that nearly 84% of the roads were hogged by private vehicles. Slow-moving vehicles like cycles and cycle-rickshaws made for 13 to 28% (averaging 19%). Buses averaged 1.9% of the traffic. Goods traffic averaged 3% (ranging from 0.5% to 10%). Increase in local industry as well as the development of suburban areas is likely to increase this pressure thus choking off roads. Thus, traffic planning has been desultory at best, especially since the important V3 roads cannot be widened any more (Times News Network, 2012).

Typical of the 'rich' mindset of the population, many claim that it is public transport lifelines like the buses and auto-rickshaws that create traffic jams and bottle-necks. There are more issues raised in the municipal council on parking and repaving of the VIP-dominated area roads than about public transport and ease of travel for others. It is no wonder that today overloaded auto-rickshaws ply from point to point at their own whims, at rates that are not specified by the administration. Many of these auto-rickshaws may not even have proper paperwork and run without any meters. Overcharging is rampant, especially at railway stations and bus stands, something which has been found to be a regular irritation to travelers here as well as those who would like to use them to travel within the city rather than use their own vehicles.

Chandigarh has been extensively photographed and published. In 1999, Popham (in Malik, 2003: 72) claimed, while comparing it with other Indian cities that, "it is the only one that is gratuitously cruel, depressing and self-indulgent by turns. From Chandigarh you would have to conclude that, as a town planner Le Corbusier was an outrageous impostor. ... Its plan, prepared in 1949, was based on four separate functions: government, work, industry, and residential. With his instinct for dazzling simplification, he declared that Chandigarh's design would imitate the human body: head (government, judiciary) at the top, stomach (shops) in the middle, lungs (park) near the shops. Why? Because it spared him the trouble of thinking any more deeply about the matter?"

In fact, these comments are to be seen in retrospect since Le Corbusier had imagined his architecture to be finely tuned to the social, cultural and political ethos of his time (Gans, 2000; Francis, 2002).

Also, it would be wrong to accuse Le Corbusier's architecture and planning for all the problems of Chandigarh. In a comparison of Chandigarh with Le Corbusier's Brasilia, it became apparent that Brasilia has managed to be different even while becoming ordered by indigenizing the architecture and planning to become more personalized and local, while Chandigarh has become more disordered and less personalized by not accepting local modifications (de Holanda and Medeiros, 2012).

Le Corbusier is said to be misunderstood about Chandigarh since instead of being a large-scaled grid with vast open spaces, it was originally seen as a polycentric cluster city. It was also seen as one of the safest motorway cities of the 21st century (Steyn, 2002).

Eventually, the vast space between the High Court and the Secretariat is exposed to heat and in Chandigarh's stomach area in its commercial Sector 22, there is little to create great photography. Chandigarh's local populace has always attempted to create a good fit between their traditional buildings which help in mitigating heat but this has been ignored by the structures in the city. Thus, neither the city's traditions nor its future social problems could be addressed by architecture and planning alone (Malik, 2003).

The city has also become polarized. Many of the problems of the city are attributed to 'those migrants' who come into the city for work and then live on. Many of those who have come here have forgotten their migrant roots. Others who were living here originally, often see their counterparts who came into India after the Partition, when parts of Punjab were sectioned off into Pakistan, as being 'refugees'. It is, of course, a fact that not many of those who were uprooted while Chandigarh was built could shift into the city as a part of its working population. Also, the city could become a successful industrial hub, since only about 20,000 people could be employed by the various industries in the Industrial Areas of the city. These views of individuals created a division,

where the elite northern sectors were considered to be better and deserving of more facilities than the more 'working' and 'migrant' areas of the southern sectors. However, cities may not necessarily be formed around industries, since Calcutta (Kolkata) is one city which has seemingly gone in for major urbanization without industrialization (Bose, 1965).

Whenever there is power shortage, multiple sources of power are managed for the northern sectors while the southern sectors are often suffering during the hot summer months with very little power and official 'rotational' as well as unofficial power cuts through the day. This has become quite an issue, since the Sectors 1-11 have residents like the Punjab and Haryana Governors, Punjab and Haryana Chief Ministers, scores of ministers, judges and other dignitaries (Sharma, 2010).

Such power cuts are also common at Panjab University, where experiments and computers shut down, sometimes for entire days. The slum areas are seen to be a good vote bank for politicians, but they are also denigrated, devalued and considered to be containing the worst kind of people. It was strange that many of the employees of the business people as well as the maids, helpers and other employees (part time or full time) emerged from these slums. In fact, it was because the salaries paid to these employees was not enough for them to live in Chandigarh that they were forced to live in cheaper areas. Many of the government and other employees cannot buy accommodation in Chandigarh anymore due to the rising prices of realty. This population, thus, feels disenfranchised when it comes to participation in the development of the city. In one recent case, the UT administration cancelled the allocation of a site at one of these areas Mauli Jagran, Vikas Nagar, because the person could not build his house at the site. Since these sites were allocated to poor persons, daily wage workers, or rickshaw pullers, it was seen to be important to give them some leeway to allow them enough time to pull in enough money to be able to begin construction of their house. After one inspection, it was found that he had not built his house by the cutoff date. Later, the person built his house and was living there but the administration cancelled his plot allocation on 6 August 2001. Eventually, this allocation was ordered to be given by the High Court, which recommended to the administration that they should adopt a more humane approach to the poor (Malik, 2011).

In fact, the aesthetic architecture harbours bees and wasps in its niches that are difficult to reach by normal methods for its residents. These insects create havoc during windy periods.

Thus, living in Chandigarh had created its own identity for the people. The high lifestyle costs of living in the city was seen to be very much a matter of status. Students living here spent profligately, wearing costly branded clothes, flashing electronic gadgets and travelling in their own cars. It has

become a point for the youth in the city, especially the males, that they needed to do these things to show off their latest acquisitions as an incentive to the well-heeled, pretty young students of the various educational institutions. The trend of going around in such large vehicles through the areas most well-known for the young, female students that live and study there has been called the 'geri' route. Though much of it is taken in good spirit, occasional incidents occur, thus necessitating enough policemen on the route.

As far as religious considerations are concerned, Chandigarh has more than 70% Hindus and about 25% Sikhs, with 1% or so Christians (see Table 2). Thus, Chandigarh has had ample opportunity to create religious organizations and places catering to all of these as well as many other sects. Some of the religious places of worship have been picturesque and well known (Bhanot and Rawat, 2012; Bhanot and Singh, 2012).

Reliving the Aesthetics: Recreating the Art of Chandigarh

Chandigarh and its models outlived the plans and ideas of its initial architects and continued to create an identity for-itself out of the in-itself that had been its creation. Over the years, many other cities in India have attempted to plan themselves in similar patterns, with varying degrees of success. In each case, local situations caused them to be modified (Walia and TNN, 2010).

However, living in Chandigarh has had its problems. Many have attempted to break out of the structure and architectural controls in order to get a better deal for themselves. Thus, houses have been modified, sometimes without permission. Initially, Corbusier had put the toilets in an accessible area outside the main house and near the stairs so that the outcastes who cleaned them would not have to come within the houses. However, as such ideas became outmoded, people started having toilets as attachments to their bedrooms and often within their main rooms. This actually shows how different Chandigarh has attempted to be and is perhaps one example of the success of its creators, because cities in India have often been planned by its creators and they have different zones for different caste groups. In such settings kin groups coalesce anew, away from their village settings and sometimes associations within such settings or outside them are forged (Rowe, 1974).

Barbel Hogner, a social anthropologist and photographer, has written a book titled *Chandigarh – Living with Le Corbusier* where she shows how everyday life in Chandigarh has transformed the Foreign architecture of Le Corbusier in uniquely Indian ways (Chimra, 2010).

Among many, the famous artist Jatin Das had claimed that the architectural designs of Le Corbusier do not fit Indian conditions, when the artist came over to the city in 2011. He strongly believes that the traditions of the country need to be learned and perpetuated for the sake of posterity

(Jaspreet, 2011). Of course, the concrete structures developed cracks due to the heat and needed high machinery level of maintenance.

Of course, many of those who have lived within Chandigarh have attempted to modify not only its art and its aesthetics but also its various facets that have been thought to be important facets of its identity itself. In terms of its content, the administrators of Chandigarh feel that it is these issues of modernization and modifications (often called 'need-based' changes) that have not allowed the city to be classified as a UNESCO heritage.

One of the rules claims that one may construct a room in the courtyard only if 10 feet of space can be left open. However, many houses do not have that much space and in Sector 47, cases have shown that after constructing the smallest possible room only 4 feet of space can be left. Thus, the rule seems to be valid only for the rich of the city, who are the only ones allowed to have a room in the courtyard. Further, about 80% of the residents have covered a large portion of their balconies and are ready to pay compounding fees, since they claim that the earlier designs kept rooms away from ventilation and became suffocating. Hundreds of residents have also created washrooms on the first floor of an LIG, which is not allowed. Some have claimed that they are ill or paralysed and thus cannot climb down or up to the second floor to a washroom that is permitted in the original plans. A garage was also supposed to be of about 66 feet earlier in HIG or other houses, while people have extended the front gate by about 4 feet to include larger vehicles which have become the norm today. In Chandigarh, there are 2 vehicles per household registered in the city. In many cases passageways have been extended to facilitate the placement and movement of household goods while white-washing. Other aged people have extended balconies at the back of the house to soak in the sun. All this has happened because in the last five decades family sizes have increased and requirements and lifestyles have changed (Bhatia and TNN, 2012).

If one asks people about the major sightseeing zones in and around Chandigarh, one is referred to Sector 17 plaza, the Rose Garden, the Rock Garden, Sukhna Lake, the Pinjore Gardens and Chhat Bir Zoo. One of the most unique of these is definitely the Rock Garden, started by Nek Chand. He started using waste materials to create a unique rock garden which has now received universal fame and acclaim and has become a major tourist site. This was never part of Chandigarh's original plans but has now become an inseparable part of its aesthetic identity.

The Administration has often seen the history and its unique architecture as something to be marketed for various reasons. They 'show off' the trees, flowers, gardens, architecture and tourist locations all through by use of pamphlets, boards and their website. The Old Architect's Building has been turned into a Corbusier Museum which houses many images, artefacts and documents relating to the past of Chandigarh including its Harappan era

archaeological findings. Much is made of the fact that the Harappan buildings were structured into sector-like spaces with straight roads between them, just like Chandigarh today. Memorabilia, like the manhole covers with the city plan inscribed on them are sold for very high prices in various sizes, with coffee mugs, coasters, images, paintings by Le Corbusier and old images of the city. All this was supposed to cater to the various tourists coming in to the city.

Some bureaucrats feel that Chandigarh is too stressed already to encourage tourists, who should be discouraged. As a result creating a world class aquarium was discouraged since “the city was basically an administrative city and encouraging more tourists will further burden the city’s infrastructure” (Mohan and TNN, 2012: 1).

The Tourism Department of the city has been claiming that the administration was committed to increasing tourism. In light of this, the statement given by the administration was severely criticized by a certain section of the press who felt that this attitude caused the failure of the vision created by Jawaharlal Nehru and Le Corbusier. The number of tourists in 2008 was 908,569 domestic and 34,762 foreign. This went up to 914,742 domestic and 37,967 foreign in 2009 (also see Table 3). However, most tourists preferred to pass through Chandigarh from Delhi or other locations on their way through to Himachal Pradesh and the Himalayas. To offset this, plans were made to promote MICE (meetings, incentives, conventions and exhibitions) tourism. This would be coupled with showcasing Corbusier’s architectural work, the Capitol complex, Nek Chand’s Rock Garden and the Sukhna Lake. It was also possible, according to the report, that this statement was the view of only a small number of administrators, but considering that the master plan committee as well as the heritage committee of the city had the same opinion, it seems to be the prevalent view (Mohan and TNN, 2012: 1).

If this is the case, then it seems as if the Corbusier Plan has been made to become, through its later followers, something that is imposing and hegemonic. Those who do not feel that they have a stake in the continued development of the city as a part of their own lives, or those who strive to maintain the Corbusier edicts without any emotional feeling, or perhaps because of their own vested interests, turn these edicts into areas of opportunity, for power and control over others.

In such a context, then, the aesthetics of the city, as being something that is participated in, is a design for whom? Is it for the outside public who would wish to see those living in the city like an aquarium, the ephemeral tourist who is also shunned by the administration? Then, is this aesthetic design for those who stay, as at an exclusive club, or is it just a status symbol? It has thus become, at least for some, an exclusive private collection, borne with public money. Also, some feel that this rule of structures given by Le

Corbusier should be maintained so that they might get the stature of a heritage city by UNESCO. The sale of icons of the city at inflated costs becomes a part of this maintenance of the Grand Plan, like the structured plan on manhole covers.

We must also contextualize city planning as a product of the times. In fact, the city seems to have been born at a period when there was a concern over city appearances than over anything else. Concerns over city living conditions became important, at about the same time in other cities. Concerns over city efficiency had become important for some cities like New York over the years. Thus, Chandigarh, unlike other cities, allowed little movement to shift itself into other modes that would be more public-oriented (Gordon, 2006).

In fact, “the road grid was re-calibrated to Paris’ 800m bus-stop spacing and the blocks and buildings had no relation to the Indian climate or way of life. They were designed using the *modulor*, a system of proportions based upon the height of a European male, which had little to do with the women, or men, of India” (Evenson, 1975). The dramatic design of the monumental complex attracted praise at first, but eventually the cultural and technical failings of the other elements of the plan drew strong criticism” (Gordon, 2006: 6).

For whom are the Le Corbusier plans to be maintained? Who are the true beneficiaries of such an aesthetic? If strictness and control over architecture is to be maintained, then for what reason? Is it of more importance than the needs and wishes of those who live within?

Is there to be none for those in-between, who are neither the changing slum dwellers of the city who have been structurally subaltern, nor the elite who are the administrative and powered images that adorn the outputs of the media? It is this majority that needs to be looked at, because they are often those who are never consulted but actually create the living aesthetic of the city. It is this in-between population who see Chandigarh as a lived aesthetic entity, who visualize Chandigarh as an ‘art world’ and who would often hate to live in some other town even when forced to do so, due to exigencies relating to education or economics.

Conclusions

It would be unfair to be able to criticize the Chandigarh administration in their attempts to deal with the problems of Chandigarh without giving some idea of possible solutions. We propose certain ideas which might work out, after discussion and the involvement of many:

1. Making governance more inclusive and transparent for Chandigarh so that people could find it easy to become involved in decision-making. A first step would be to involve not just the moneyed, political

and powerful elite but also members of the general public who would find a way of being included. This could be coupled with a transparent method of keeping the public involved with regular announcements, free sharing of data and informed consent or data transfer through their website. This would give many people a reason for participating in the idea of Chandigarh and a stake in its aesthetic maintenance and betterment.

2. This would be coupled with a better public transport system, including pedestrian walkways, places for the disabled to function normally, as well as a time-bound system with metered public transport at cheaper rates than are currently available. The city officials have often found it more suitable to look for costlier modes of transport than for cheaper ones. It is believed that this would be a crucial step in maintaining equality of access to all parts of the city thus increasing the access to the aesthetics of the city as well as increasing the stakeholders to it. It would also aid the ephemeral tourists, thus increasing their number, since at least some of the tourists look for cheaper alternatives. This could also be a way of earning carbon credits. Also, the administration should promote and give benefits to those who go in for public transport or car pooling.
3. A third method of increasing those who have a stake in making Chandigarh continue to remaining the City Beautiful that it is claimed to be is by ensuring that the majority of the employees also get access to cheaper housing. One way would be to create housing cooperatives by and for employees that become available to them at cheaper costs. In such cases architectural and aesthetic controls could be maintained by vetoing building plans through a system of consensus.
4. One way of shifting the status of acquiring higher rates for realty would be to create experimental colonies having alternative and self-sufficient lifestyles with limited-period leases, to be extended only if the sustainability is successful over that period. Such systems could be part of a knowledge bank for the city which could become a source of knowledge revenue for the city. The current tendency of the city officials has been to release small amounts of prime land through auction to sell it to the highest bidder for large amounts, thus sky-rocketing realty rates in the whole region. Often those who bid are people who have a vested interest in the realty business, where cases are often seen of people bidding high and then once having obtained the plot, failing to pay for it. The forfeiture of the initial amount is often seen by them as investment for increasing realty rates in the region.
5. One way of getting higher revenue would be to shift the business of governing from the short term to the long term. Businesses that would

be likely to benefit in the future may be promoted, by charging them less, so that returns for the government might be higher in future.

6. One method for creating an emotional attachment to the idea of Chandigarh would be to promote and inculcate among the people a variety of sports teams, in the pattern that sports teams of different states of India create feelings of togetherness.
7. Of course, without a long-term plan for Chandigarh, all these issues come to naught. However, the idea of fashion parks and film cities (already in place but awaiting permission) may work well here since these areas are already popular among members of the public and people come from many areas to Chandigarh to create events related to these.
8. One good way of involving people would be to promote voluntary organizations from the general public rather than from the more elite, bureaucratic, political one like STEPS, to promote a more equitable and humane idea of Chandigarh for the future.
9. In order to instill within the people of local regions a sense of community, steps should be taken to ensure community-level activities and events that create a feeling of togetherness and the enjoyment of each other. This would also ensure care for the infirm, aged or the young as well as security and 'good practices' for all.
10. People from all walks of life should be party to decision-making processes rather than them being a matter of vested interests of the few. In fact, most vehicle-owners and their children rarely get to know how the public transport system in the city operates. Therefore, they are often incompetent in matters of decision-making relating to public transport. This is especially shown in the way bus stops are located and the how much pedestrians have to walk to change buses to another route. Often bus stops are made of materials that neither protect individuals from the sun and the rain and also do not have adequate places to sit in. Private institutions also seem to have enough power to stop bus routes from running through sectors which they inhabit, like the way Panjab University in Sectors 14 and 25 allow no public transport buses to ply within the campus.

A controlling and hegemonic rule over a city like Chandigarh needs to be rethought in the current spaces of democratic governance today. This would be a legacy of the god-like and deified architect Le Corbusier who was very fascist in his ideas of control, especially in the by-laws and architecture of Chandigarh (AP, 2010). As a result of this and the short-sighted and biased planning, eventually, Chandigarh has become a biased city, with differences in egalitarianism and access between as well as within its different sectors. A

much more inclusive city needs to emerge as a symbol of modern India, than the elitist and exclusive one that has already begun to emerge with clearly spelt out divides between the haves and the have-nots. Le Corbusier's "open hand" meant "free to give; free to receive" at the very least, if not, as one researcher was to note, anything that one was supposed to mean. This has so far been overturned by the present administration by turning the town into an exclusive club with stringent rules of membership. In the same way that the "open hand" originally built by Le Corbusier has been controlled through security allowing only the most elite access to it, the majority of the people of Chandigarh also find it difficult to access the city. Such a trend needs to be reversed.

A city springs through the working of the mind. A space emerges within certain individuals of the possibility of its existence. It is seen as a symbol, as a possibility, something only humans have been said to have in full capacity to create. The space is then mapped out in reality. People are shifted out to create this space. Then it is recreated through the work of multiple architects, some of whom are symbolically 'pushed out' by the rhetorical imposition of others, just as the ideas of Mayer were used and superimposed by those of Le Corbusier. People then come in to live in this created city. However, to make this created city uniquely theirs, to appropriate it, they attempt to make it closer to their heart's desire by imposing their own will on it. These willed impositions accumulate over the years in spite of the controls, so much so that those who hold the controls are then questioned about their legitimacy. Thus, it must be understood that aesthetics is also contested. It is a contestation of those in power with those who live in the everyday. In this contestation, everything is risked to achieve a balance. It is in this balance of usefulness, symbols, power and structure that a new aesthetic emerges every day. To understand the various flows and the relations between people that gives rise to this present is what anthropology does, something that never ends.

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Table 1
General Characteristics of Chandigarh's Population Over the Years

| Year | Sex Ratio | Density | Population | Population Growth (%) | Literacy (%) |
|------|-----------|---------|------------|-----------------------|--------------|
| 1951 | 780 | 213 | 24,261 | 7.47 | na |
| 1961 | 651 | 1052 | 119,881 | 394.13 | na |
| 1971 | 749 | 2257 | 257,251 | 114.59 | 70.4 |
| 1981 | 769 | 3961 | 451,610 | 75.55 | 74.8 |
| 1991 | 790 | 5632 | 575,829 | 42.16 | 77.8 |
| 2001 | 777 | 7900 | 900,635 | 40.33 | 81.9 |
| 2011 | 821 | 9,252 | 1,025,682 | 17.10 | 86.56 |

Table 2
Religious Groups in Chandigarh over the Years
Religion (% of total population)

| | 1971 | 1981 | 1991 | 2001 |
|------------|-------|-------|-------|------|
| Hindus | 71.68 | 75.27 | 75.84 | 78.6 |
| Muslims | 1.45 | 2.02 | 2.72 | 3.9 |
| Christians | 0.97 | 0.99 | 0.78 | 0.8 |
| Sikhs | 25.45 | 21.11 | 20.2 | 16.1 |
| Buddhists | 0.04 | 0.10 | 0.11 | 0.1 |
| Jains | 0.39 | 0.42 | 0.24 | 0.3 |
| Others | 0.0 | 0.06 | 0.01 | |

Table 3
Tourism at a Glance

| Item | 1990 | 2000 | 2003 |
|-----------------------------------|---------|---------|---------|
| International Tourists arrival | 6,147 | 14,612 | 17,051 |
| Domestic Tourists arrival | 251,932 | 486,355 | 567,259 |
| Beds available in hotels | 3,154 | 3,600 | 3,750 |
| Nights spent by foreign tourists | 6,686 | 43,132 | 26,259 |
| Nights spent by domestic tourists | 316,976 | 705,028 | 642,259 |

Table 4
Chandigarh Slum Population (2001)

| | |
|------------------|------------------|
| Total Population | 107,098 (11.89%) |
| Males | 62,747 |
| Females | 44,351 |
| Sex Ratio | 707 |
| Literacy Rate | 55.46 |
| Males | 65.59 |
| Females | 40.9 |

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