

# Contesting visions: hybridity, liminality and authorship of the Chandigarh plan

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This article examines the authorship of the plan for Chandigarh, the new capital of the Punjab, created following its partition consequential on Indian independence. The literature on Chandigarh's planning, celebrated principally because of the central involvement of Le Corbusier, is largely architect-centric, descriptive and positivist, with few critical evaluations. Despite exposing readers to the complexities involved in planning the city, scholars anchor their narratives around what they call the 'Corbusier Plan'. As they talk about it, they create and shape the Corbusier Plan as a unified and uncontested creation. Also missing in the discourse is the idea that people – including administrators, politicians and planners – are not passive recipients of external ideas; ideas do not get transmitted across cultural boundaries without mediation. The exclusive praising of Corbusier only reflects the poverty of the discourse and its narrators. This paper offers another narrative. It argues that the plan is negotiated between multiple agencies and is not the creation of a single author. As most of the actors advocated various 'modernities', the plan represents 'contested modernities' and a particular moment in the planning process characterized by the collision and collusion of the advocates representing different imaginations for India and Chandigarh, identities, details and the compromises they made. No single imagination emerged victorious; no one author created the plan. The very idea of plural authorship, or authority, challenges the order of the discourse as it is. However, the plan is much more chaotic, hybrid, liminal and diverse than its architect-centred discourse suggests.

## Introduction

Cities are increasingly regarded by both researchers and practitioners as contested spaces [1]. Despite this, there remains a strong tendency to see the famous plans for well-known planned cities largely as uncontested outcomes, for example Burnham's plan for Chicago, L'Enfant's plan for Washington, and Kenzo Tange's plan for Abuja. According to this kind of hegemonic view, Baron Haussmann becomes not only the author of Haussmannization – the massive transformation in Paris in the 1850s–70s that is identified closely with him, but also in a wider sense of modernity [2]. Yet, instead of giving so much importance to the single vision

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Figure 1. Location of Chandigarh.

of a single author, is it not better to see these plans as representing contestations, negotiations and compromises of imaginations? Calling the grand claim of Haussmann into question, David van Zanten has asked what share of credit should go to him [3]? The same question can be raised about Le Corbusier's celebrated plan for Chandigarh (Figs 1 and 2).

Chandigarh's significance goes beyond being one of independent India's first newly built state capitals; its importance cuts across global, national and city scales. It is not only the highest-profile city-building project in independent India, but also one of the twentieth

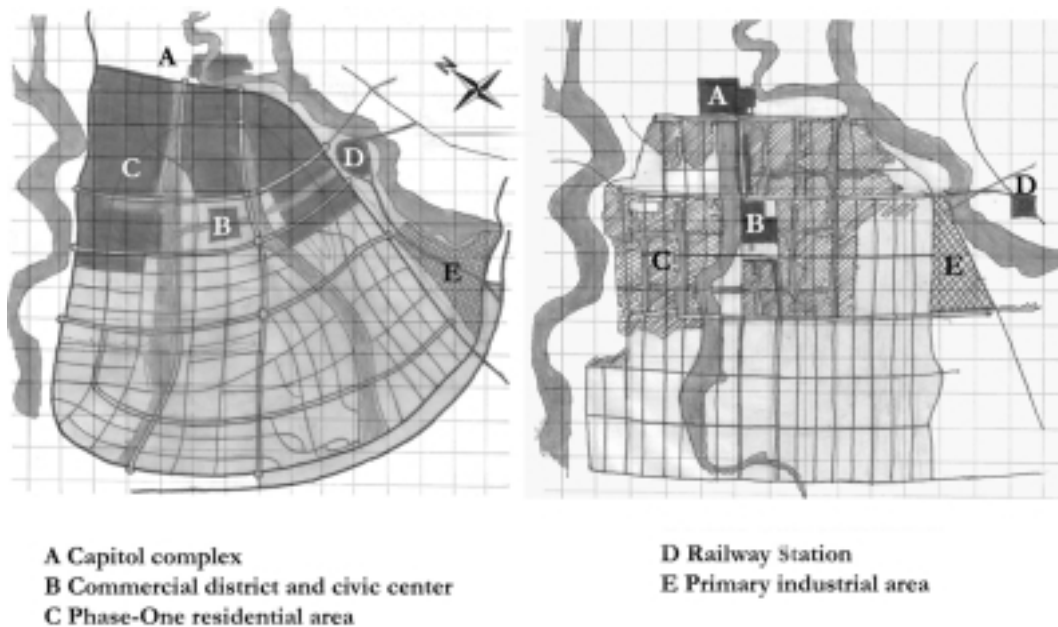


Figure 2. Plans prepared by (a) Mayer and (b) Corbusier. (Sources: NIC; Kalia, *op. cit.*; N Evenson, *op. cit.*)

century's globally significant city-building experiments. The need for it was created by the division of the Province (later State) of Punjab between India and Pakistan – separated at independence in 1947 – and the allocation of its magnificent capital, Lahore, to Pakistan. Although the social function was to be the administrative centre of Punjab, the city acquired national significance and the attention of the national leaders from the beginning.

The planning of Chandigarh involved India's independence, the partitioning of the British colony and the resulting flow of refugees across borders, the new state of India, the allocation of several major cities to the new state of Pakistan, nostalgia for places lost in the geographical and political tumult, various aspirations, imaginations and their conflicts and contradictions. Making the process even more complex, two plans were prepared for the city: the first by a team led by American architect-planner Albert Mayer and the second by Swiss-French architect Le Corbusier. The project was initially awarded to the American firm Mayer and Whittlesey in January 1950, with Albert Mayer and an American-domiciled Polish emigré, Maciej Nowitzki (Nowicki), being the primary designers. Corbusier's subsequent plan was supported by Pierre Jeanneret, Maxwell Fry, and Jane Drew. According to authoritative sources, Nowicki's death in August 1950 and the American dollar's increasing value were the primary reasons for replacing the Mayer team with Corbusier in November 1950. The city was formally inaugurated on 7 October 1953.

Both the admirers and opponents of Chandigarh share a common and curious position – that sole authorship of Chandigarh's plan belongs to Corbusier. Critics on both sides acknowledge the existence of the Mayer–Nowicki plan before Corbusier's plan. They also agree that there is little substantial difference between the two plans. Yet dismissing the

original plan, they claim that the author of Chandigarh is Le Corbusier. Fry illustrates this peculiar position when he states: ‘The plan that finally emerged from the combined efforts of Mr Mayer and ourselves . . . owes nearly everything to Corbusier’ [4].

Chandigarh is a well-studied city, but the literature about it is largely architect-centric, descriptive and positivist, with few critical evaluations. The discourse is rich with information but weak in well-informed interpretations. The majority of work approaches the city from a physical standpoint and the discourse revolves around its designer, marginalizing its residents, political leaders and socio-political and historical contexts. The well-attended conference held to celebrate fifty years of the idea of Chandigarh focused heavily on Corbusier [5]. As a local newspaper reported:

by the time the [first] day’s proceedings wound up, one was left wondering whether the whole bunch was here to celebrate the existence of a persona called Le Corbusier. For speaker after speaker . . . sang paeans to Corbusier, the genius within him, the artist that he was . . . [6].

The leading scholars of Chandigarh, particularly Ravi Kalia, Madhu Sarin and Norma Evenson [7], recognize the efforts of the first planning team and the various roles played by many social agents, such as Indian national leaders. Yet the discourse is premised on the belief that a city plan can and should have an individual author. Despite exposing the readers to the complexities of planning a city, the scholars anchor their narratives around what they call the ‘Corbusier Plan’. As they talk about it, they also create and shape this Corbusier Plan as a unified uncontested-imagination.

In regard to the way discourses are circulated and consumed in Western culture, Griselda Pollock observes that the name of the author confers the status of the particular discourse within society and culture to the exclusion of others [8]. James Clifford argues that ‘the very idea of plural authorship challenges a deep Western identification of any text’s order with the intention of a single author’ [9]. The following quotation from Kalia highlights the irony and ambiguity this underlying power structure imposes on scholars:

Le Corbusier introduced his own ideas, retaining nevertheless all distinctive features of the Mayer Plan. . . . [Yet Mayer’s] role in Chandigarh was overshadowed by the indomitable and eclectic personality of Le Corbusier . . . With Mayer reduced to a simple footnote in the history of Chandigarh, it would be Le Corbusier who would be popularly remembered as the creator of the city [10].

Evenson is confident that, ‘[i]n the adaptation of the Mayer plan by Le Corbusier, most of the general features were retained. The general site remained the same, and the (residential) superblock principle was incorporated, although the individual blocks were enlarged and regularized’ [11]. ‘As the city now exists [in the 1960s], it owes to [Corbusier] only its skeletal outlines, while the flesh and substance have been created by others . . .’ [12]. Yet, for Evenson, Chandigarh is Corbusier’s masterpiece. Even Sarin, who empowers the marginalized inhabitants through her work, states that ‘the basic principles of Corbusier were uncompromisingly applied’ in Chandigarh and Brasilia [13].

Despite these scholars’ references to other social agents, Corbusier is still considered to be the author of the plan. The drawing of the physical plan has, thus, been equated with providing it with meaning in a deeper sense and the author of the plan is thereby viewed as the creator of the city. The plan has, thus, been attributed with authenticity and purity. The critics take an intellectual leap from these questionable assumptions to claim the city plan for

Le Corbusier. In contrast to other possible approaches to understanding, the discourse does not, in Barthes' terms, 'assassinate' the author or consider the plan to be the result of a series of 'texts' [14].

What is missing is the idea that, in Goh Beng-Lan's words, the 'people are never passive recipients of external initiatives, but rather always struggle within their own immediate contexts of constraints and opportunities to produce a meaningful life with their own particular values and goals' [15]. Transmitting an idea – or a model – of a city across cultural boundaries causes it to transform, enabling the message to become somewhat meaningful for the receivers in their own contexts. The roles played by the Indian leaders, Punjabi officials, the Mayer team and Chandigarh natives and settlers in the development of the city are acknowledged, but their contributions are devalued. With little analysis and interpretation, these actors have been used to develop a politically-passive context within which Le Corbusier can be understood as Chandigarh's grand creator. The discourse is, thus, characterized by faulty assumptions and jumps in the logic [16]. This article examines and reflects on these gaps.

The 'regular' story has, of course, been told many times, so it will not be repeated in any detail here. Rather, other possible interpretations will be examined. In this context, it is considered more relevant to explore other actors, voices and positions, thus, creating room for multiple voices and other interpretations, than to unearth more information without questioning the prevailing discourse. Hence, this article draws attention to the omissions and silences in the discourse and develops an alternative (though not diametrically opposed) interpretation to those dominant. In so doing, the article considers the performance of the author-function by Le Corbusier as one among many conditions of existence of the Chandigarh plan. It rejects both premises of the discourse: the consideration that the plan is an object caused by a single creator and the structuralist notion of autonomous texts (the plan). Instead, it adopts the position that meaning is contingent on the discursive contexts in which signs and texts are produced [17]. In contrast to aesthetically and physically inclined approaches adopted in the large majority of studies, this study views Chandigarh's planning process as a social construction of space and takes the vantage point of participants (other than Corbusier) involved in making the city and its plan. Thus, the plan will be read from outside the centre of the discourse.

The next section highlights the significant planning decisions made by the Indian leaders, Punjabi officials and other Indian participants. After this, the differences between planning approaches adopted by the two planning teams and the plans produced by them are examined. The central argument is that the final plan is a hybrid of imaginations negotiated between multiple agencies, rather than the creation of a single author. Although the inhabitants have subsequently modified the city, this aspect of later adjustment is not considered here.

### **National aspirations, bureaucratic visions and negotiations**

The national aspirations for the new city represented in Nehru's idea of India and the notions of modernity fostered by Punjabi officials had a profound impact on the plans and the planning of Chandigarh. The first Prime Minister of India, Jawaharlal Nehru, and the

officials, especially A. L. Fletcher (Officer on Special Duty to the government of Punjab), P. N. Thapar (the administrative head of the project) and P. L. Varma (Chief Engineer, Development, East Punjab), had different visions for Chandigarh, and India and remained divided on many significant counts. The national leaders and Punjabi officials' views and social power also changed over time, making the planning of Chandigarh a complex process of collisions and collusions between major stakeholders. Their impact on the plan is evident in the city's location, the size and programme, the importance of the neighbourhood unit, the separation of pedestrian and vehicular traffic and some European modern and garden city influences. This section investigates the aspirations of Nehru and the Punjabi officials in respect to their impact on the location of the city, the programme and selection of planners.

The significance of the concept of a project with the high expectations associated with Chandigarh cannot be overstated. Yet, previous scholarly and professional discussion of the city has undervalued the initial processes of visioning and concept development. According to the prevalent discourse, Nehru, the Punjabi officials and Corbusier all desired a 'modern' city and the scholars tend largely to conflate the visions of the national leaders, officials and designers into a single 'modernity.' Yet, however incomplete they may have been, the visions for the city were formulated prior to the appointment of planning teams. The 'staggering desire of its leaders to establish India as an independent and modern nation, in many ways, shaped the new city', observes Kalia [18]. The city became an important site for the expression and negotiation of their visions of modernity. This process of envisioning and negotiation gradually made the city materialize.

The former President of India, K. R. Narayanan, states that Nehru wanted a city 'unfettered by the traditions of the past' and Le Corbusier's modernism and internationalism answered this requirement [19]. Most critics use this powerful quote to propagate this common myth; here, the statement is taken out of context to monumentalize and legitimize Corbusier's work by associating it with Nehru's aspirations. The idea that Nehru was unsympathetic to Indian history is implicit in the way this statement is used when, on the contrary, his thinking was dynamic and forward looking yet strongly rooted in India's history. Instead of viewing tradition as stagnant, he focused on the changing spirit of culture:

India is a . . . cultural unity amidst diversity, a bundle of contradictions held together by strong but invisible threads. Overwhelmed again and again, her spirit was never conquered, and to-day when she appears to be a plaything of a proud conqueror, she remains unsubdued and unconquered. . . . She is a myth and an idea, a dream and a vision, and yet very real and present and pervasive. . . . From age to age she has produced great men and women, carrying on the old tradition and yet ever adapting it to changing times [20].

Nehru's imagination of modernity was, therefore, 'Indian' and lay outside the European modern which Corbusier promoted.

In regard to possible post-colonial built-forms, many staunch nationalists favoured searching the past for inspiration, including the Mogul style and historic treatises like *Mansara Shilpa Shastras*. Yet, the dominant trend was to move 'forward' and anything to do with 'tradition' was associated with backwardness [21]. Nehru's idea of modernity was not the simple opposite of traditional, but was constructed within a continuity and change of

tradition. Kalia argues that Nehru wanted to build community life on a 'higher' scale without breaking the old foundations of India [22]. As Chatterjee and Kenny suggest, Nehru's vision of 'new' India presented the possibility of combining its spiritual heritage with the 'scientific temper' of the Western societies [23].

Nehru was certainly not confined to learning from India alone. He made a sharp distinction between directly borrowing from other countries and adapting aspects from other societies, making them compatible with Indian conditions and resources. He believed in India's ability to learn from other cultures and 'Indianize' elements and aspects borrowed from them. 'It was India's way in the past to welcome and absorb other cultures. That is much more necessary to-day' [24]. Nehru's imagination was, thus, located between the 'India-traditional' and the 'Western-modern', which is here styled as 'Indian modernity'. In his words,

there can be no real cultural or spiritual growth based on imitation . . . true culture derives its inspiration from every corner of the world, but it is home-grown and has to be based on the wide mass of the people. Art and literature remains lifeless if they are continually thinking of foreign models [25].

Nehru positioned himself in relation to the (post)colonial and Cold War contexts, among others. On the one hand, he disliked the colonial city, particularly New Delhi [26]. On the other, he was inspired by both superpowers – the USA and the Soviet Union. Yet, he did not support the emulation of either but promoted instead selective learning from the rest of the world. It was within this hybrid and liminal imagination of the world-polity that Nehru became an initiator of the Non-Aligned Movement as an alternative to the then-prevalent global political structure defined by US–Soviet duality [27]. His 'postcolonial' vision was international, but was strongly grounded in the nation. 'We have to play our part in this coming internationalism' he states, 'But real internationalism . . . has to grow out of national cultures and can only flourish to-day on the basis of freedom and equality and true internationalism' [28].

In regard to the city, Sunil Khilnani stresses that Nehru was in search of a way to renew it and to use it to display an Indian modernity distinct from and free of colonial versions [29]. Along with transforming borrowed elements to make them acceptable to the host culture, the host culture itself also has to adjust to accommodate the new elements [30]. With regard to housing, Nehru said: 'we should . . . investigate what changes we should make to make our buildings conform more to Indian conditions and at the same time have some artistic value' [31]. It is within this 'third space' that Nehru conceived Chandigarh.

Nehru's vision of the future city followed the ideas of economic development [32] as well as responding to Indian conditions. Development projects were highly important for him and, in his speeches, Chandigarh was usually mentioned, along with the Bhakra and Nangal development projects which later became the core energy source for northern India [33]. These particular projects were highly important for him and he showed them to Soviet leaders who visited in 1955 [34]. It was within the general conviction that India must industrialize to survive and prosper that he saw Chandigarh as a showpiece of economic development [35]. Yet, neither the refugee settlements nor the industrial new towns provided the model for Nehru's 'future city' [36]. His imagination of Chandigarh was based on the Indian reality. 'I saw the plan of the new capital for Orissa [Bhubaneswar] and I was very

much impressed by it', he said. 'This was built entirely round the social life of the city keeping in view of schools, markets, etc., as well as official buildings' [37]. The type of expertise suited for his mission was neither 'pure Indian', nor simply 'Western'.

The city was not simply a physical fact for him: 'The main point in building a city should be to keep the social aspect always in view. This is usually . . . forgotten, and people think of putting up a number of imposing official buildings' [38]. It is not sufficient to consider modernity as merely ideological: the product of state or capitalist domination [39] or one which is totally imposed by the West. The rush to construct a new city in Chandigarh represents the somewhat messy process of searching for an 'Indian modernity' by its leaders.

The aspirations of Punjabi officials and those of Nehru clashed, with the former more inclined towards a 'European modernity'. Thus, A. L. Fletcher, an Indian civil servant on special duty to oversee the creation of a new capital, began with a programme for the city that was explicitly rooted in garden city ideas [40]. Significantly, when Le Corbusier asked about the Indian traditional *Vastu Purusha Mandala* which he came across during his brief stay in India, P. L. Varma, the chief engineer in charge of development in the Punjab, knew little about it [41]. The officials did not believe the city of their imagination could be created by 'Indians' or Indianized Westerners. Varma and P. N. Thapar (who became administrative head of the Punjab capital project in 1949) wanted to visit Europe to find a suitable architect for the project.

Nehru rejected this approach. He feared that a planner from England or America would not know the social background of India: 'He will . . . be inclined to plan something which might suit England or America', also wondering 'if you have explored the possibilities of getting the master plan made in India?' [42]. More pointedly, he used his authority to deny permission for the administrators to visit Europe [43]. Instead, he suggested two Western planners already working in India, Otto Koenigsberger (involved in the planning of Bhubaneswar) and Mayer. Nehru believed both were familiar with the country and might be able to create a city of his imagination. At the time, his power was too much for Punjab officials to challenge and Mayer was given the job.

Determining the size and the location of the city are the two most significant decisions made by a planner. Yet, in Chandigarh, these decisions were already made before the planners (that is, the architects) took over and became their point of departure in their own work. The literature on Chandigarh points to the conclusion that both site and scale were determined at the national, not the local, level. Chandigarh was conceived in a time of crisis caused by the creation of a separate Pakistan and the Indian leaders saw the new city as a potential symbol of the creative strength of the new republic [44]. There was agreement between Indian leaders and Punjabi officials in regard to the scale. The decision makers took three major considerations into account in selecting a site: security against Pakistan, adequate space and the potential to replace the material and psychological loss of Lahore, a magnificent city which had been the hub of Punjab's commercial and cultural activities prior to its allocation to Pakistan [45]. The 115 km<sup>2</sup> site chosen in March 1948 is at the foothills of the Shivalik Range of the Himalayas, which provides a picturesque backdrop, and is bounded by two river beds about five miles apart.

Evenson observes that, after all the effort and consideration that went into establishing criteria for selecting a site, it is ironic that the place for the new capital was literally chosen



by flying over the province in a plane and picking an area that looked appropriate [46]. The best site for the authorities would have the potential of communicating an impressive visual message. The site was negotiated between a number of agencies and the politics of location was sophisticated. The stakeholders took two major positions. One group advocated the building of a small official town, with a population of 40 000 to 50 000, within or attached to an existing city. The other group desired to build a new town on a new site, with an initial population of 150 000 which would become a 'Lahore', a city that would 'gradually develop into an educational, medical, commercial, cultural, and industrial centre' [47]. Most politicians who wanted the city to be located in their domain favoured the former view.

Varma and his team of engineers supported the latter view which responded to, and fed off, the popular Punjabi nostalgia for Lahore and larger national aspirations. When diplomacy failed to overcome this impasse, Varma appealed to national leaders to resolve the conflict. Nehru's intervention on Varma's side decided the site and scale. According to Nehru, 'If you had chosen an old city as the capital, Punjab would have become a mentally stagnant, backward state' [48]. He helped the administrators by suggesting the strategies of quickness and engaging people in constructive activities to overcome what he called 'local troubles' [49]. In 1952, Nehru reflected on this decision: 'it would have been of no use merely adding a few more localities to an existing city' [50]. From the administrators' standpoint, the site had to be physically suitable and the Surveyors' Report of June 30, 1949 endorsed the site [51].

Although Nehru preferred a nationally rooted design, the Punjabi officials laid the groundwork for a European-type modern city. The parameters were largely based on Western concepts of appropriate development. The self-contained, use-specific neighbourhoods and direct references to garden city principles illustrate the dependence on Western concepts. This continued dependence on Western know-how represents a paradox: in Khilnani's words, independence means being free to emulate colonial city life [52]. Yet, as Arjun Appadurai argues, 'decolonization is a dialogue with the colonial past, not a simple dismantling of colonial habits and modes of life' [53].

The desire to assert an Indian identity in Chandigarh in preference to an existing local identity is evident in the eviction of over 6000 local families from the area. Refugees (from the new Pakistan) were also kept away to ensure a clean slate. At a time when India was trying both to encourage non-violence and accommodate a large number of refugees, it was quite extraordinary to force over 28 000 people to leave their land so the Punjabi government could have a home [54]. Not surprisingly, there was considerable opposition to the appropriation of the site from existing villagers. The government bought all the land at once under the Land Acquisition Act of 1894, allowing the inhabitants to remain 'as tenants of the government', but only until the land was needed for building purposes [55].

Nehru's position regarding displaced people seems ambiguous and lay between his aspirations for the future and extant conditions in India to which he was obliged to respond. Earlier, he had advised administrators to go ahead with the project quickly so they could begin to provide for many refugees [56]. He cautioned Mayer: 'there is one fact to be borne in mind, and I hope it does not come in the way of your general planning. This is to make provision for the displaced persons from West Punjab' [57].

Yet, the Punjabi administrators created a site 'unfettered from existing encumbrances'. They not only separated the new capital from old cities in the region, but also evicted the

inhabitants of the site and resettled refugees elsewhere in the region. Separate refugee towns were built on sound functional principles and modest lines, with little concern for ‘grandness’, ‘style’, or any connection to the lost former capital at Lahore. Nor was Chandi Mandir (Temple of the Goddess Chandi), from which the city derived its name, incorporated. It is located in the nearby village of Mani Majra [58]; and no new temple for Chandi was built in Chandigarh.

A *tabula rasa* was created in this way to allow the building of a city that would show the Indian upper middle classes how to shape their nation’s future. Concurrently, the administrators were in the process of creating a perfect administrative city without outside interferences. This context later gave Corbusier the idea that ownership of land should remain entirely in the hands of the state during the planning phase and only then be transferred to individuals, strictly in accordance with the plan [59]. This approach also reinforced his team in their desire to exclude the construction workers and other ‘undesirable elements’ from the city.

This is to jump ahead, however. Before Corbusier became involved, it is important to note that the conflicts did not end with Mayer’s appointment. Not everyone in the Indian government shared Nehru’s enthusiasm for him, though most critics remained discrete about their feelings [60]. When Chandigarh was ready to be built, the overwhelming desire of the Indian government was to create a great monumental city which, for them, symbolized India’s future. Although Nehru won the initial contest, the Punjab officials, who had throughout favoured hiring a planning and design team from Europe, won the larger battle when they were able to hire the team led by Corbusier. Nehru held fast to his position until the death of Nowicki in an air crash in 1950, at which point he let the Punjabi officials visit Europe in search of an architect [61].

This highlights the significant role played by Nowicki. Despite scholars’ constant reference to ‘the Mayer plan’, it was largely elaborated and detailed by Nowicki, who also designed the buildings. Among the foreign-born designers working on Chandigarh, he demonstrated the greatest sensitivity to India, and his work was the most place- and culture-specific [62]. He was Nehru’s last hope and his death was a great turning point in regard to the Chandigarh project. In effect, this is when Nehru surrendered his leading role to the officials. Nehru still exerted great influence, but no longer directly over the bureaucrats. The ‘non-committal’ quote at the entrance to the City Museum in Chandigarh both captures his influence and distance from the project: ‘it hits you on the head and makes you think’.

### Designer ambitions, cultural conditions, and the hybrid plan

The lack of monumentality is the primary reason given for not implementing the Mayer–Nowicki plan. The principal actors who emphasized the visual appeal of the site most likely envisioned a monumental city within this setting. According to Evenson, the Mayer proposal ‘does not read as a monumental capital’ [63]. ‘Although the Indian officials of Chandigarh had originally been completely satisfied with the Mayer plan, it may have been the added qualities of monumental urbanity which moved them to accept . . . the changes proposed by the second group’ [64]. This way, the Corbusier team hired to *implement* the Mayer–Nowicki plan assumed the role of a *design* team and changed the

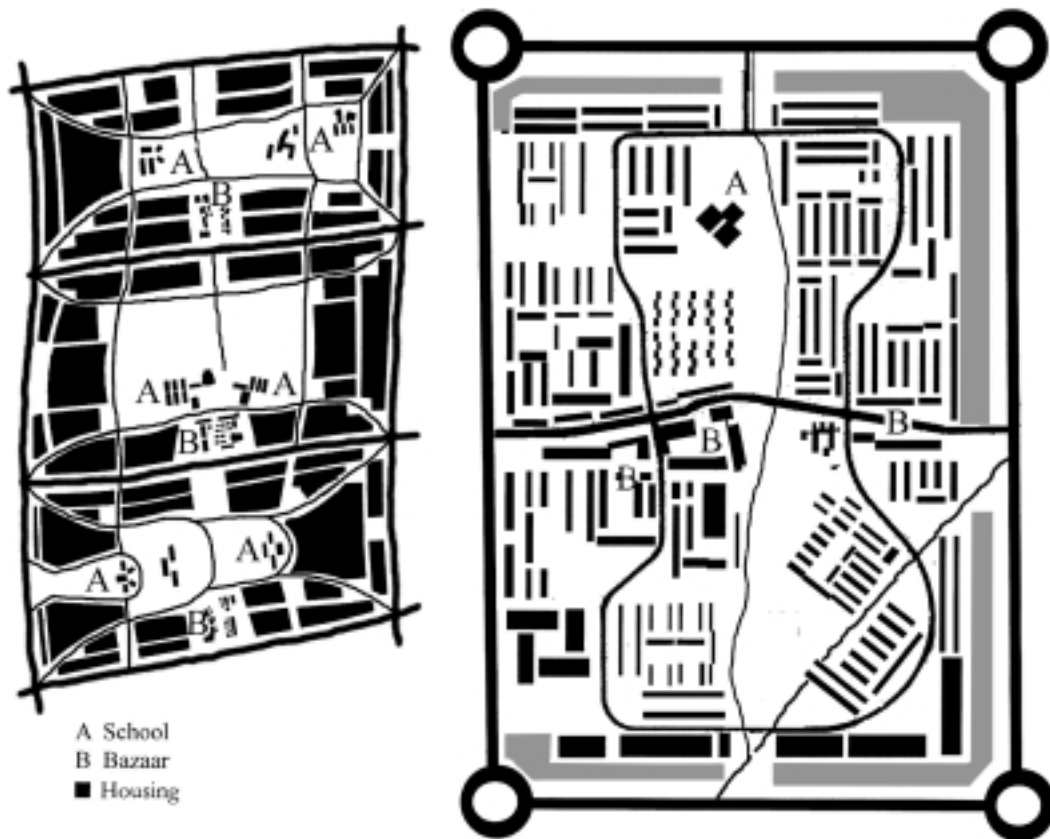


Figure 3. Districts in the two plans: (a) three superblocks from the Mayer plan; (b) a sector from the Corbusier plan. (Source: National Informatics Centre; R. Kalia, *op. cit.* [7]; N. Evenson, *op. cit.* [4].)

plan. In regard to the Indian stakeholders, this change put the administrators' views above those of Nehru.

Using the Mayer–Nowicki Plan as his starting point, Corbusier and his team made many changes (see Figs 2 and 3). The curving roads were straightened into a grid-iron. More separations were added to the circulation system and the location of the capitol complex adjusted. The residential block was also enlarged and the civic centre and central business district combined and moved further north. The railroad station was relocated beyond the river and the amount of open and recreational area increased. The resultant new urban form was less reliant on the natural features such as streams and did not use landmarks to create spatial character. The Corbusier team also made more use of sculpture to give character to the new city [65].

The resulting differences between the plans are ideological as well as physical. The teams adopted different planning approaches. Each team's vision, consideration for future inhabitants, response to cultural and environmental conditions and focus were very different.

The plans were developed within two different visions of what makes a good city and two different notions of what is good for India. Le Corbusier was an uncompromising architectural modernist, whereas Mayer was influenced by garden city principles as they had come to be understood and adapted in the USA during his professional life. Despite these differences, however, both their approaches responded to problems facing the industrial city in Europe and the USA and advocated a better environment. Yet, the validity of these responses to the industrial city in a socially different, 'pre-industrial', India was hardly questioned. India was expected to industrialize and follow the economic trajectory of the West, but the literature on Chandigarh rarely refers to the category 'West'. As Prakash observes, within the hegemonic understanding of architecture, the Indians make Indian buildings but the 'Architects of the West do not specifically make Western buildings' [66].

In regard to differences between planning approaches, garden city advocates sought a spatial escape from the industrial city, a way to create cleaner living environments by combining urban and rural characteristics away from the problematic industrial city. The modernists imagined a temporal escape into a 'post-industrial' future. They believed in creating a future that would be radically different from the industrial present and the European past. The garden city was envisioned as a better place; the modernist city as a better time.

The garden city model popular in the USA at the time was based on the 'Radburn ideal', of 'decentralized, self-contained settlements, organized to promote environmental considerations by conserving open space, harnessing the automobile, and promoting community life' [67]. The Americanized version of the garden city was larger and more diverse than that which Ebenezer Howard had conceived for England, the source of Fletcher's garden city. Nor was the original Howardian ideal of communal ownership incorporated in Chandigarh. The neighbourhood unit was also given far greater importance than it had had in the original garden city formulation. Thus, a more obviously US garden city influence is apparent in the neighbourhoods of the Mayer-Nowicki plan. Mayer used the US examples of Baldwin Hills to explain the superblock idea and Radburn and Greenbelt to explain the proposed system of internal pedestrian paths [68]. He believed that the superblock would be particularly suited to India, where most people were either villagers or city dwellers of recent village origin (Fig. 3).

For Le Corbusier, the garden city was a 'pre-Machine Age utopia' [69]. He supported urbanization and a city 'free from the "inhibiting restraints" of the past' [70]. The overall ideology to which Corbusier subscribed, which James Holston calls 'architectural modernism', was developed in the manifestoes of the *Congrès Internationaux d'Architecture Moderne* (CIAM). Modernists believed that the transformation of the built environment could instigate social change and that 'modern architecture and planning are the means to create new forms of collective association, personal habit, and daily life' [71]. Moreover, separating the city's key functions is central to modernist planning; the functions were to be organized so that each was a mutually exclusive component within the city. The modernist city, thus, became a dehistoricized, decontextualized and unfamiliar space employed to transform society. For Khilnani, Chandigarh's radical meaning lay in its unfamiliarity [72], physically represented in straight roads, the strict grid-iron, vast open spaces, separated land uses, the uniformity of principal components of the city and the use of letters and numbers to name places.

The second area of difference between the two approaches concerns the prospective inhabitants of the city. The Mayer–Nowicki plan had a strong concern for the inhabitants. From the beginning of Mayer’s career, he focused on socially conscious planning. Prior to his engagement in India, he had been a public housing consultant to several government agencies and, after retiring from his firm in 1961, he concentrated on urban renewal projects in the USA. According to Evenson,

the philosophy behind the Mayer plan was based on a humane ideal. The dominant concern was the quality of domestic life within the city, and there was a consistent desire to provide a city which would be decently habitable for all its citizens and to make the ordinary actions of daily life both pleasant and easily managed [73].

In contrast, the architectural modernists undertook to transform their daily practices by creating an environment that would constrain ‘traditional’ practices and engender new ones. Corbusier’s concern for people was, therefore, abstract and at the scale of ‘human’ history. In this context, Chandigarh was conceived from a European vantage point to provide the inhabitants with a particular economic future and social identity at the expense of the cultural comforts of a familiar environment. While a broad range of government servants were provided with housing, many others, including those who actually built Chandigarh, were excluded from the city. Providing housing for them has posed a serious dilemma [74]. Those allowed to stay in Chandigarh were, by design, subjected to severe income stratification (Fig. 4). The wealthiest residents and most prominent government officials were placed in sectors adjacent to the capitol in spacious houses built on large lots, with the residential sectors becoming increasingly poor moving away from it [75]. In addition to income segregation, the location of average residents far from activity centres made it difficult for them to maintain formal employment, particularly in a city where public transportation is inefficient.

The third crucial difference was the designers’ response to India’s culture and environment and how each adapted their vision to such a context or, in other words, their degree of ‘Indianization’. The experiences the planners had in India, their views about it and the degree of ‘Indian culture’ they chose to accommodate in their plans were radically different. Mayer not only spent more time in India, but also learned from it. This is best illustrated in the experience he had at an Indian hospital. After his visit with Nehru’s young daughter (herself a later Indian leader, Indira Gandhi) at Kamala Nehru Hospital, he was critical of the large number of visitors that each patient had. From his perspective, the patients could not get much rest while their relatives and friends swarmed noisily in the corridors. However, he realized that ‘if this practice was not permitted, the Indian people, with their close family feelings, would simply be frightened of coming to the hospital’ [76].

By the time he undertook the Chandigarh project, Mayer seems to have become Indianized to a more obvious extent. Beginning with model-villages, Mayer had helped develop master plans for Kanpur, Bombay, Delhi and studied the works of missionaries in India, including hospitals and schools. He addressed such aspects of daily life as cooking techniques and the differences in Indian and US bathing facilities [77]. A large part of the Chandigarh planning meeting of February 23, 1950, for example, was devoted to explaining how various aspects of the Indian way of life would affect the city’s design. Meanwhile, as Mayer tackled the nuances of design and Indian life, Nowicki was consciously addressing cultural issues. Chris



(a)



(b)



(c)

Figure 4. Residential segregation: (a) houses of higher level administrators compared with those of (b) middle- and lower-level government servants and (c) self-builders.

Hellier argues that Mayer's primary concern was to develop a neighbourhood unit modelled on the romanticized Indian village [78]. Yet, both Mayer and Nowicki were conscious of the limitations of their understanding of India and believed that their proposals for Chandigarh needed testing [79].

In this manner, Mayer and Nowicki engaged in developing an 'Indianized modernity', albeit one with contours that differed from those of Nehru's imagination. Mayer claimed he would design a city that, simultaneously, was both modern and Indian. 'Nowicki was keen to end all his modern architectural creations with the Indian idiom of built form' [80]. According to Mayer,

We are seeking to build a city not in our idiom, not the city of bold winged engineering and cantilevers, which India's . . . resources do not justify, but a city in the Indian idiom fused with our own simplicity and functional honesty [81].

For his part, Nowicki endorsed the idea of the traditional home-cum-workplace of a small entrepreneur or artisan. His sketches include typical Indian features such as shops with platforms to sit on the floor and overhanging balconies or awnings, with separate areas for hawkers. This house-cum-workplace had typical traditional features like brickwork *jallis* and screens to shield the windows from the hot summer winds [82].

Five months after his appointment, Mayer wrote to Nehru that Chandigarh

will be the most complete synthesis and integration in the world to date of all that has been learned and talked of in planning over the last thirty years . . . Yet . . . we have been able to make it strongly Indian in feeling and function as well as modern [83].

While Nehru searched for an 'Indian modernity,' Mayer and Nowicki had developed an 'Indianized-modern' response.

In sharp contrast, Le Corbusier's views of Chandigarh as well as India were largely those of an outsider. Critics concerned with social aspects of Chandigarh argue that his plan was not based on any substantive study of the Indian society [84]. Instead of familiarizing himself with Indian conditions, he opted to familiarize the Punjabi administrators who visited him in France with architecture appropriate to a modern civilization. He sent them to see his *Unité d'Habitation* in Marseilles which represented his new approach to design developed after World War II and said, 'without false modesty: Your capital can be constructed here' [85].

For Corbusier, the city was not a place where inhabitants determined its role in their daily lives; rather, the city determined the roles of its inhabitants. Corbusier's intent was to create particular subject positions through design which would transform the inhabitants into modern subjects who could fill these positions. Critics argue that the organization of sectors are too self-sufficient, not dense enough and respect European and middle-class type privacy [86]. Even the actors of this stage-play were predetermined; there was no room in the city for the very people who built it [87].

The few days Corbusier spent in India, before he actually began planning Chandigarh, did not Indianize him much. What understanding he did develop was shallow and ultimately had little impact on the plan [88]. If Prakash's speculation that Corbusier used the shape of the horns of bulls in the roof of the Assembly is valid [89], it demonstrates that Corbusier was unable to see beyond the geometry of both material objects and living beings he saw. The culture was elusive from this perspective, fixed within the visual and seen from a European eye. In contrast to the forms Nowicki had designed for the assembly [90], which were based on the Indian *stupa* that symbolized the sacred mountain, Corbusier drew on an industrial image – the cooling towers of a power station in Ahmedabad [91]. He later added some aspects of sundials, but his view focused on the Sun from a Western, scientific perspective and made no connections with the cosmos that is part of an Indian world view. His focus was on the aestheticization of science. In this construction, a ray of light falls on the Gandhi statue in the Punjabi Assembly on his birthday.

As Sumet Jumsai observes, Corbusier knew nothing about the Hindu–Buddhist cosmology nor the sacred mountain, Mount Meru, which was right in front of him as he worked [92].

Unlike Nowicki, who incorporated Mogul design elements such as formal gardens and water terraces, Corbusier incorporated water as reflecting pools. Focusing on European modern aesthetics, he preserved the planes adjoining the capitol as a backdrop [93]. According to Balakrishna Doshi, Corbusier ‘felt and sensed the need for air circulation and its connectedness to the open to sky’ [94]. The first impressions of India and the Himalayas which he sent to his wife highlight the presence of air in an empty but vast sky with flying birds in Chandigarh.

Kenneth Frampton argues that Corbusier’s work in Africa indicates that he had become sensitive to local conditions [95]. Yet, he concentrated more on climatic and environmental conditions than culture and society. As the present author has argued elsewhere [96], the principal adaptation of modernist architecture to distinct and particular places is symbolized in ‘tropical architecture’, spelled out by Drew and Fry. This adaptation suggests that architectural modernism ‘was not just European, but was also constructed within the premises of Eurocentrism, undermining the social and cultural values of non-European people, and recognizing only a climatic difference in relation to [“well-balanced”] temperate Europe’ [97]. ‘The west European “Climatic Other” was . . . a subtle objectification of the subjects referring to more impersonal, material, and scientific factors than the . . . “Cultural Other” which explicitly referred to their culture and the belief system’ [98]. Corbusier intended to modernize what he saw as a static Indian society:

India had, and always has, a peasant culture that exists since a thousand years! India possessed Hindu . . . and Muslim temples [Maharaja palaces, and gardens] . . . But India hasn’t yet created an architecture for modern civilization (offices, factory buildings). . . . [W]e will be able to . . . give India the architecture of modern times [99].

Several key physical parameters were actually direct imports from France, suggesting that Corbusier’s contribution was more connected to Paris than India. According to Evenson, ‘[Corbusier’s] fondness for Baroque expansiveness combined with his long-term obsession with the industrialized city had rendered him unsympathetic to the functional workings and aesthetic subtlety of the traditional Indian environment’ [100]. For Frampton, the provision of bus stops at 200 m intervals reflects a rhythm in the Parisian transportation network and the proportions of the monumental axis follow those of Paris [101]. Though the template was no longer that of the former imperial ‘motherland’, it was ironic indeed (though has certainly not been unique) for a newly independent country to adopt voluntarily the same processes of mimicking patterns from a ‘more advanced’ Western city to which it had so recently been subjected under colonialism.

These imports highlight a profound mismatch between an approach to planning which privileged an ‘outsider’s’ view and the ‘normal, chaotic, but nevertheless colourful and alive character’ of Indian urbanity [102]. This favouring of an external representation is illustrated in the greater time and attention Corbusier invested in the capitol complex and monumental buildings. These may represent Chandigarh to outsiders; they do little to create a sense of place for its residents. For Sagar, ‘the city’s modernism sometimes appears to sit strangely on a people’ [103]. He aptly argues it is not the physical environment that is the key to having colourful and live urban spaces in Indian cities, but the street trading activities of cobblers, barbers and bicycle repairmen using the roadside space to earn a living by providing services for the city and thereby also animating the street scene [104].





(a)



(b)



(c)

Figure 5. Familiarizing space: (a) market places provided by the authorities compared with (b, c) those created by the vendors.

Yet, the comparatively low level of activity in Chandigarh's road sides and the commercial sector speaks volumes of the impact this particularly unfamiliar place has on the daily practices of its citizens (see Fig. 5).

The principal spatial focus of each team was also contrasting. While Corbusier viewed the city from the capitol complex, the Mayer–Nowicki team approached it from the neighbourhood. The neighbourhood was the basic generative unit, with the design team concerned to promote its strength, unity and identity and beginning the planning process from this point. In Mayer's words: 'We did not plan down to [the neighbourhoods] but up from them' [105]. The focus of the city for Corbusier was the capitol complex, which received most of his attention. Evenson emphasizes that,

[j]ust as his earliest schematic designs have placed emphasis on the large-scale generalized aspects of the city, making little attempt at developing the more intimate texture, so in Chandigarh Le Corbusier restricted his planning efforts to delineating the major outlines of the master plan, and the creation of monumental complexes [106].

Corbusier was not only successful in designing the capitol as the most significant component of the city, but also in making this view hegemonic. Anupam Banerji highlights the irony: 'If we can call its design a success, then its success lies in its myth-making power, in what it can conjure as a causeway to distant memory' [107].

The differences between the plans are, therefore, far greater than Corbusier simply making a few changes to the Mayer plan. In contrast to the social and cultural focus of the Mayer–Nowicki plan, the Le Corbusier plan is altogether more concerned with the physical. Chandigarh is often described as a designed city, not a planned city [108]. For Sarin, the changeover from planners to architects, represents a fundamental shift in priorities, towards a preoccupation with visual form, symbolism, imagery and aesthetics rather than the basic problems of the Indian population [109].

### Competing modernities, hybridity and the authorship

Despite the important changes Le Corbusier made to the Mayer–Nowicki plan, there are fundamental continuities from the first plan to the second. According to Doshi, 'Other than rectifying Mayer's plan and determining the essential architectural zoning (*sic*) of the principal streets . . . Le Corbusier was not able to transform the basic . . . Master Plan or its housing provisions' [110]. As Patwant Singh emphasizes, the city plan did not become entirely Corbusier's [111]. Corbusier himself was not happy with the plan; he believed the city (phase I) should be further urbanized before expanding it (per the Phase II plan). Corbusier was, therefore, not able to realize his wishes in full. Ironically, he was not able to achieve the ideal population densities for his model but ones that were more compatible with the rival model of the garden city. Some of the parameters of the second plan associated with Le Corbusier were those developed earlier by the Mayer–Nowicki team. Yet, the most important similarities between the plans are effects of the wishes of Indian officials. The 'Corbusier plan' is, therefore, a hybrid map of contested imaginations. It was influenced by architectural modernism, garden city principles, the aspirations of Indian leaders and Punjabi officials, Indian realities and highlights the conflict between the various modernities represented in the views of the principal actors.

Although Corbusier replaced the superblock with the sector, the feel of his sectors continued to be that of a garden city. The population densities – 25, 50 and 75 people per acre – were very low compared to the ideals of a modernist city. For Kalia, the Corbusier Plan represents a horizontal garden city [112]. The park system stands out in supporting this view. The result was a low density garden city, something Corbusier fought against his entire career [113], yet because he also substantially transformed the Mayer–Nowicki garden city, the result is more a modernist-garden city. Yet, the adoption of the garden city idea in regard to Chandigarh certainly did not originate with Mayer. Rather, it was an Indianized notion promoted by Fletcher and other Punjabi administrators. According to the Cabinet Sub-Committee on the New Capital, the industrial area was to be built in the form of a 'satellite

industrial town' on 'garden city principles' [114]. The proposal, thus, inverted Howard's idea of developing residential satellites. This paradoxical requirement represents the Indian desire to achieve both modernity and industrialization and, thus, be both in the industrial age and the second machine age, simultaneously.

Moreover, although it is not well acknowledged in the literature, Corbusier did Indianize to some extent during his involvement with Chandigarh's planning. Huet asserts that the Second World War changed Corbusier significantly, making him realize that architecture cannot substitute for politics. This provided the context enabling him to make the first compromise between his modernist idealism and the Indian reality. He realized that his 'wheel of ideas' was not feasible in any part of India but that accepting the Chandigarh commission would enable him to materialize his dream. It would be an opportunity to have his greatest buildings built. He had missed several opportunities to build a city but, in Chandigarh, he had a political support that he never enjoyed in Europe [115]. If he did not bring a concern for its culture, he did incorporate in his Chandigarh work a few of his observations he made while in India. His fascination with machines and the value he placed in the Sun, led him to an interest in sundials and transformed his own cooling tower aesthetics of the assembly to that of solar ritual [116].

As Corbusier focused on the capitol complex, his plan turned out to be 'incomplete'. In Charles Correa's words, Corbusier 'decoupled the four buildings of the Capitol Complex from the city and placed them against the foothills of the Himalayas, thus setting himself an intriguing architectural exercise' [117]. According to Aditya Prakash, who saw the city develop, Chandigarh was planned as an élite city and the rest of the city, beyond its planned, élitist limits, grew by creating its own momentum [118]. 'Unfortunately, the non-formal sector of the city life has not found acceptance in the planning process' [119], even though the self-built, informal and largely self-sustaining communities which resulted are essential ingredients of the city [120]. Those excluded from the planned city engaged in creating their own spaces, represented in self-built housing, non-planned settlements, satellite towns and new industrial areas. Over 100 000 people now live in these self-built settlements [121]. The 56 factories and 2500 workers in the administrative city of Chandigarh in 1976 had increased to 579 factories and 25 000 workers by 1995 [122].

All 'powerful' actors advocated 'modernity' (though they meant different things by this label) and the plan represents 'contested modernities'. Corbusier opted for a better time – the second machine age – and Mayer–Nowicki proposed a better place – the garden city. While Nehru was searching for an 'Indian modernity', a global and post-colonial reality rooted in India, the Mayer–Nowicki design proposed an Indianized modern (garden) city. The administrators desired a functional 'scientific' (administrative) city influenced by garden city ideals. While Fletcher's garden city was rooted in Britain, Mayer's was its US version. Hence, various modernities were involved in the planning of Chandigarh and these were questioned, contested, deconstructed and reconstructed many times during the planning process.

Planning began long before the 'planners' were selected and the city is still being transformed. The plan, thus, represents the state of negotiations between the powerful advocates of different imaginations when it was accepted. It was a particular moment in the planning process characterized by the collision and collusion of advocates representing different imaginations, identities, details and the compromises they made. While some of the negotiations did not end with a compromise, some did when a decision (such as the site

selection) was made, moving the planning and negotiation process to a different stage. These decisions constitute reference points in a fluid planning process. In contrast, the literature largely constructs a clean and linear planning process by looking back on the decisions and connecting them with neat lines and freezes the plan in time.

The most important planning decisions, such as conceiving the city, determining its location and creating its programme, were negotiated between the administrators of Punjab, regional political leaders and Indian leaders. Nehru's desire to create a city representing an 'Indian modernity' was, in a way, shared by Mayer and Nowicki, but was compromised by the appointment of Corbusier. While the Punjabi officials were able to circumvent Nehru's wishes and hire a modernist architect from Europe after Nowicki's death, Le Corbusier and his team transformed Nehru's imagination by infusing (European) architectural modernism into Chandigarh. Many aspects of the plan were also negotiated by the members of each planning team, those who continued to work on Chandigarh after Corbusier and by the inhabitants of Chandigarh.

In short, no single imagination emerged victorious; no one author created the plan. While Nehru, Mayer, Nowicki and Le Corbusier could each claim victories, the plan does not have a single authority. Each participant's involvement was strategic and together they achieved the hybrid plan for Chandigarh. Nehru's support for Corbusier's architecture was strategic, so was Corbusier's closeness to Nehru; their ideas were not congruent but their support was complementary. Corbusier received political support at an unprecedented scale; he also received legitimacy by association with Nehru. Representing the compromises he made, Nehru claimed, in a different tone, that the city did make the Indians think:

I have welcomed very greatly, one experiment . . . some like it, some dislike it, it is totally immaterial whether you like it or not. It is the biggest in India of this kind. That is why I welcome it . . . it hits you on the head and makes you think. You may squirm at the impact but it makes you think and imbibe new ideas, and one thing that India requires in so many fields is to be hit on the head so that you may think [123].

Within his larger imagination for India, Nehru could have been oblivious to the model and contents of the city which might have been viewed as details within his larger national and international perspectives. The creation of an administrative city was successfully promoted by the civil servants and, in hindsight, they were the most successful. It turned out to be a modernist-garden city, both European and Indian, but most of all an administrative city. At a larger scale, the powerful were united in marginalizing the refugees, the previous inhabitants of the site and the low-income residents of the city. However, it is rapidly being Indianized and familiarized by the same people who were originally marginalized; they are finding their way into the modern 'forbidden' city.

In sum, it is erroneous to believe that a single person created the city plan for Chandigarh, or that the city plan is complete. Many participants were involved in creating the plan and most of them did have a substantial influence. The plan is, thus, 'messy' and does not fully represent the ideas of any single stakeholder. The very idea of plural authorship, or authority, challenges the order of the prevailing discourse. It makes the participants operate with more unknowns than knowns and uncertainties which challenge the authority of the plan makers and story-tellers of Chandigarh. There is no authenticity or purity to the plan or the city, which is still being built. The plan represents many voices and an exclusive praising of

Corbusier only reflects the poverty of the discourse and its narrators. It is much more chaotic, hybrid, liminal, disorderly and diverse than its architect-centred discourse suggests.

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