

Imagining Chandigarh

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Chandigarh is a shibboleth for our time; our pronouncements upon its success and failures tell as much about ourselves as they do about the city. Instead of looking at the Capitol complex, this paper focuses on the city itself, working back and forth between the design intentions of the architects involved, the physical presence of the buildings, and the characteristic material and social textures of the city. The conceptual formulations and rhetorical strategies employed by the principal architects are evaluated and illustrated through contemporary photographs taken by the authors during recent visits. The photographic record, with its evidence of physical and social weathering, provides other frames for imagining Chandigarh: as the discursive space of nation-building; as the material clutter of individual lives. With this, the conventional construction of Chandigarh as a pivotal moment in the history of European and Indian modern architecture becomes just one of the many ways Chandigarh is lived and imagined.

Now I have welcomed one great experiment in India which you know very well — Chandigarh. Many people argue about it, some dislike it, some like it. It is totally immaterial whether you like it or not; it is the biggest thing because it makes you think and imbibe new ideas. And the one thing that India requires in so many fields is to be hit on the head, so that you may think. I do not like every building in Chandigarh. I like some very much. I like the general conception of the township very much. But what I like above all this, is the creative approach — not being tied down to what has been done by our forefathers and the like, but thinking out in new terms; trying to think in terms of light and air, and ground and water and human beings, not in terms of rules and regulations laid down by our ancestors. Therefore Chandigarh is of enormous importance, regardless of whether something succeeds in it or not.¹

— Jawaharlal Nehru (1959)

Chandigarh was once the harbinger of a brave new world, the brightest star in the architectural firmament, an object of both intense admiration and vilification. It was, and remains, a significant event on the Indian horizon: a crucial element in its early cosmogonies as an independent nation-state, and a seminal influence in the professional development of Indian architects.

The intense debates that it generated are an integral part of the roller coaster ride of western architectural modernism as well. Chandigarh has had a particular mystique; by some quirky accident, an epochal event in the history of western architecture had happened elsewhere, on the farthest periphery of an exotic land. Unlike any other modern architectural pilgrimage, the road to Chandigarh traversed a particular psychological terrain, in search of a dubious patrimony, fabled and flawed, both familiar and strangely “other.”²

Today, Chandigarh does not beckon with the same urgency. As its

architectural currency has diminished in value, it too has receded in our field of vision (like a ruin in the jungle or an Atlantis buried undersea), while taking on the metaphorical resonance of a cautionary tale. In the cultural politics of the new global-capitalist India, it is a non-starter. The action is in Bombay (where the most expensive commercial real estate in the world drives another kind of architectural exploration), or in Bangalore (India’s booming Silicon and San Fernando valleys rolled into one).

Four decades of sustained anti-hagiography have hardened into a conventional wisdom that finds Chandigarh synonymous with failure on all fronts, a monument to the willfulness of modern architects. While there is truth to all the clichés, this is a guilty verdict painted in very broad strokes. Today, Chandigarh is a city of over half a million people with a distinctive physical presence. It is a north Indian city with a particular ambiance not unlike other, and earlier, planned communities in India. In its ordered hierarchies, it resembles the sprawling cantonment towns of British India. At Chandigarh, the modern technocratic vision has, perhaps unwittingly, reproduced a landscape not dissimilar from the one predicated on colonialist notions of physical and social hygiene.

At the same time, it delivers a quality of life that is, on average, higher and more egalitarian than in most other Indian cities. An overwhelming majority of its first-generation residents were uprooted refugees, anxious to move out from ramshackle camps and begin their lives anew. A rather remarkable experiment in housing took place there — for the first time minimum standards were established for all social classes, from peons to ministers. Unlike the dynamic cacophony of most Indian cities, however, there is a sheen of sameness in Chandigarh that contributes to an impression of it as ephemeral, not-quite-India, deracinated and anodyne. In this it seems to resemble the American suburban condition, the price one pays for a corner of the world that is relatively quiet, safe, and clean.

The multiple impressions that Chandigarh invokes index the many Chandigarhs that co-exist: the mythical, canonical, fictional, and the mundane. Chandigarh is a shibboleth for our times; our pronouncements upon its successes and failures tell as much about ourselves as they do about the city. Perhaps, therefore, the question, “What is wrong with Chandigarh?” is still useful, because the answers to it are not fixed, and will continue to shift, as they mirror our design preoccupations and ideological frames. Within the dialectics of tradition and modernity, the local and the global, of design and social policy, Chandigarh still resonates.

In a sense, then, it is useful to clarify the vantage that informs this invocation of Chandigarh. As a subcontinental (though from the other side of the border) with an American architectural education, the first visit was fraught with undercurrents.³ Armed with special visas, I had finally made it to the canonical ground zero of heroic modernism; yet it was uncannily familiar. I had seen all this before,

and not just in pictures: the color of the burnt brick, the fetishistic concern with the surface of buildings. Edward Durrell Stone notwithstanding, the architects of Islamabad's Capital Development Authority had definitely looked at Chandigarh vernacular. Or was this a case of a more local, subcontinental strain of modernism? Walking around was both exhilarating and maddening. So much made sense, yet one could not help being struck by the obviousness of the design blunders. How could this be? For the design team was some of the time's brightest and best, with all the world's good intentions. Clearly many of the decisions they made, some of which now seem so obviously ill-considered, must then have seemed so right that they may not even have been aware of alternatives.

The two primary decisions — that an entirely new town was needed, and that a team of foreign architects should be engaged — were taken by politicians and administrators, not architects or urban designers, and thus fall outside of our discussion here. In any case, other agendas were in effect, political machinations and public relations motives of far greater concern to the charismatic leader of new nation, and the Brahmins of the Indian Civil Service who formed the new government, than merely the quality of life in a provincial capital. The Indias Nehru and Le Corbusier discovered in their imaginations, and projected upon the “tilting plain” along the foothills of the Himalayas were outsized and undercooked. The bombast and its deflation both haunt and scar that landscape today.

Let this be a new town, symbolic of the freedom of India, unfettered by the traditions of the past. . . an expression of the nation's faith in the future.”

— Jawaharlal Nehru (1951)

Are we still in India?” Omi said, at his first sight of Chandigarh.

The roads were wide and spotlessly clean. The buildings, pink and white and cream and gray, were strange but beautiful. They had straight lines, grilled facades, or pigeonholes stuck to the front. “Best and beautiful this is,” he said.

— From Balraj Khanna's novel *Nation of Fools*.⁴

The design brief was very clear. Chandigarh was to be a part of the new India, the India of dams and industry — independent, modern, and on the march. And that being modern, it would bear as little a relation to past ways of living as possible. There was no other way; modernization meant the import of goods and ideas, and becoming modern meant stripping bare and leaping into the comet tail of the twentieth century.

Of course today, from our more nuanced understanding of modernity and its trajectories, we know that modernity might not follow a specific script; we are even beginning to appreciate how it appears locally in original and novel forms. When Chandigarh was conceived, however, it was not possible to think of a modernity refracted through the prism of the local. Rather, in an altogether different operation, the signs of modernity were to be stamped upon fresh-faced nation-states.

In a very literal sense, Chandigarh is both a brand mark and a branding. Its road system, for example, even after fifty years in circulation, remains a willful imprint upon the landscape, still unassimilated into the local rhythms. It reflects the ideology of its visioners and their overarching faith in the mechanistic model; their almost fetishistic concern for the separation of traffic into different zones — the rigid caste system evident in Chandigarh's plans identifies eight different types — for a society that had few motor vehicles and in a small town that would have questionable need for them.⁵

Within this system of overdetermined circulation, walking is an adventure. The movement of cars and pedestrians may have been sorted out according to the speed of travel and desired destination, but no thought was given to the physical form and scale of the streets. Its almost as if the streets were graphed and then projected on to the

land without a single street section having been drawn. True to the technocratic vision, the cross-town arterials were built first, the pedestrian routes last or not at all. The privileged few who drive are overindulged by the street layout; those who walk find their own road.

There is a certain frisson in this. The looping routes and pedestrian cul de sacs that Le Corbusier mapped out for the interior of each sector may have made sense were the sectors densely built. However, with most of the sectors riddled with empty lots, the science of the system is simply bypassed in favor of the most direct connection. As the citizens of Chandigarh, on foot, in rickshaws, on mopeds or bicycles, jump curbs and zigzag across dusty lots, the “donkey's path” returns to disfigure the pristine geometries of the master plan.

The eight “V” at Chandigarh have created an extraordinary clear vocabulary. . . . When one says Lotus Street or Republic Boulevard no notion has been evoked. But if you say: “the V-2 Republic” or “the Lotus V-5, everything becomes explicit; one knows instantly the nature of the ways, their importance, their location in town. . . . At Chandigarh we have created our language. But the administration people have fallen into the abstract, into the insubstantial. They have given to each street the name of a famous man. . . . Alas how humanity does fly out of the clarity.”⁶

— Le Corbusier

The valorization of efficient circulation is palpable as one moves through the byways and thruways of the sleepy town. They are simply connections between points of origin and destination, a function of time rather than of space. There are no streets in Chandigarh, only breaches, clear stretches of space that rarely cohere into place. It is almost as if a vibrant street life were a suspect notion. Even the bazaar streets (V-4's) lack clear, strong, and identifiable morphologies. On most commercial streets shops (with flats above) line one side only; Le Corbusier wanted to “avoid frequent road-crossing.”

The lack of comprehensible street morphology unglues Chandigarh: neither houses, neighborhoods nor sectors connect and add up to make comprehensible groupings. From the material evidence, it appears that the architects went from the master plan (that laid out the “V” streets and the sectors) directly to building design (primarily housing) without having considered the architectural armature that the middle scale of streets provide. Even in Sector 22 (the first fully planned sector where Pierre Jeanneret, Maxwell Fry, and Jane Drew did most of the work), none of the pieces cohere at scales larger than their own, neither within or between each housing type. The cross-town V-3's render each sector a fortress, within which different housing groups float like independent hamlets.⁷

It is this spatial flaccidity that casts a characteristic pall over the city. Chandigarh, for an Indian town, is remarkably indecorous in its disregard of proprieties of scale and adjacency: unlike the compact and introverted department of north Indian towns, it sprawls and slouches, like a teenage NRI.⁸

The urban fabric of Chandigarh is largely the result of the housing projects designed by the three resident architects who developed a whole range of house types and an identifiable idiom as well. To a very great degree, the three tried to work within, in Pierre Jeanneret's phrase, the “ethical and technical context of the country.” The budget and house types established by the administrators in charge of Chandigarh, the rigors of the climate, and the available materials and construction techniques prescribed the parameters of their design research.

The bureaucrats had spelled out thirteen different house types, categorized according to job category (from the residence of the Chief Minister to two-room quarters for the lowliest peons), site area, cost per house, and number to be built.⁹ This exercise in social,

physical, and economic classification, however, also had a progressive agenda. For the first time, minimum standards for habitation were established: every unit was to have access to indoor plumbing, water-borne sewage, electricity, a minimum of two rooms, and an outdoor area. This was what Nehru's "Ram Raj" (people's rule) promised and what every civilized, independent, nation-state ought to offer its citizens, in any case.

The ramifications of this social engineering were uneven. The high land development costs of providing all these services influenced only some of the design choices that were made: while the housing for the upper officials replicated the colonial model of urban and social planning (detached bungalows sitting behind boundary walls surrounded by large lawns), all low and lower income housing was organized into terraces on narrow deep lots with shared service and structural walls.

Maximizing the space-cost ratio and meeting the minimum room requirements became a primary yardstick during the design process. This seems to have had an impact on the nature of domestic space that the architects did not foresee. Given the nature of Indian domestic arrangements (the presence of joint and extended family), the rituals and taboos governing public appearance and privacy (the presence of servants, *purdah*, etc.), and the exigencies of climate, Indian domestic architecture tends to be an accretion of primary and ancillary spaces appended together. With the designers calculating space efficiency by maximizing the number of rooms, all the ancillary, overlapping spaces that give Indian domestic space its flexibility dropped out of the equation. This loss is amply evident in most low-cost housing in the Indian sub-continent. In Chandigarh, it is perceptible in the parched rationality of the massing, despite the rather rich vernacular of materials and forms developed by the architects for their low cost housing projects.

Building economics also seem to have played a part in the design decision to use terraced housing as the primary housing type. Nine-inch load bearing brick walls with reinforced concrete batten roofs were the main structural components; standardization of spans to reduce formwork costs limited experimentation further. In any event, the design innovations realized by studying the spatial structure of "spontaneous settlements" (the "slum" studies of John Turner et al.), and the development of "cluster" models were yet to happen and so, in a sense, they did not exist as viable alternatives to terraced housing.

They do, however, illuminate a condition that was not apparent to the architects weaned on the nostrums of CIAM. The street, conceived either in nineteenth century European or CIAM-inspired functionalist terms, is not a ubiquitous element of the pre-colonial Indian urban landscape. North Indian towns, like others found in hot, arid climates, tend to have introverted structures. The street sections within the housing blocks of Chandigarh derive from the *siedlungen* of European modernist housing as they simultaneously index the spatial formations of colonial "garden" suburbs; the civil lines and the cantonments of the British Raj.

One wishes that these well-intentioned designers had done their homework, a little more looking at what had preceded them. Even the colonial military barracks would have taught them some important lessons on how to adapt terraced formations for the Indian landscape. Urban housing designed by British Indian architects such as Henry Nicholls and Walter George in the twenties and thirties suggests how cellular, linear aggregations can be shaped to accommodate social and physical contingencies. And how, in turn, these formations give shape and scale to the urban fabric. Of course, one can argue, that figuration and inflections within systems are compositional templates that did not exist within the ideologically constrained tool kit of these designers. Eyes that are trained to look in certain ways will not see what lies right in front, despite all good intentions.

Housing design is not rocket science, but it is where architects can learn their chops. What this requires, of course, is careful observa-

tion, hard work, and a faith in the formal and compositional lessons of precedent and typology. The design criticisms offered here are, of course, subject to critique themselves. In many academic circles they would be considered unfashionable, if not downright old-fashioned, especially given the all the other modes of critique and readings possible today. But it is our contention that so much of what is wrong with Chandigarh is a direct result of a design process not as rigorous, or as supple, as assumed by the architects. The systemic is not necessarily schematic nor insentient; rather systems can be intelligent and supple.

In the case of Chandigarh, establishing higher densities would have forced the designers to take responsibility for the "no man's land" they so wantonly produced — the odd dribbles of dust, weed, and detritus that now litter the sectors. Secondly, the housing blocks ought to have been more sensitive to orientation — with respect to the sun, to typology, and to culture — and more articulate in their acknowledgment of their four sides. Instead what we have are separate housing schemes whose forms and spaces do not register their own orientations, let alone the other buildings along the street. The backs of buildings are articulated with the same energy as their fronts; sometimes they bear no relation to each other. Corners are never articulated — all housing types are treated as extruded systems, that are then lopped off at random intervals.

Typically streets provide the disciplining armature and the shared vernacular that coalesce homes and housing into communities. Here little attention was paid to these traditional concerns: the fit between the building and the street; or variations in facades along the street; or the threshold between the public and the private, between inside and outside, between neighborhoods. Just a little nuance and care in the articulation and relationship of its parts would have gone a long way in relieving the anomie and disconnection of Chandigarh's neighborhoods. Instead of knitting sectors together, the wide asphalt washes of the main streets leave them marooned.

What does give Chandigarh a sense of coherence, and where the architects made a significant if controversial contribution is its unprecedented material and rhetorical language. By using the limited materials (exposed and plastered brick used for structure and finish, stone and rubble walls, brick and concrete jalees, reinforced concrete lintels and slabs, a minimal use of glazing) at their disposal in many different combinations, Fry and his colleagues ended up producing an "acceptable vernacular for general use," a pattern book for weaving the fabric of a city built from scratch.

In putting together a new idiom for architecture based on local materials and techniques, the architects took on a tremendous task, equal in importance to the rhetorical bravura of the language Le Corbusier unleashed in the buildings of the capitol complex. While "Le Corbusier's heroic idiom in concrete... proved to be a catalyst of staggering effectiveness," the Chandigarh pattern book was more modest, conflicted, and porous to individual variation. It was almost immediately assimilated into the vernacular of both the indigenously-trained architect as well as the builder-contractor.¹⁰

While the elements of this vernacular certainly referenced the primary issues of local materials, techniques, and climate, individual design inclinations and idiosyncrasies do appear in the work of the three architects. The visual presentation will more closely describe the elaboration of this vernacular in the work done by these architects. Perhaps the most controversial, and pervasive element in the kit-of-parts are the sunbreakers that appear in all manner and form. In a sense the *brise soleil* is the avatar of the modern-primitive mindset, Europe's reformulation of the native's *chajja*'s, *jalee*'s, and *verandah*'s. Yet its jungle gym abstractions have none of the nuanced pragmatics of these local solutions. The rejection of the *verandah* or balcony in favor of sunbreakers was willful design on the part of these architects, an effacing of the local evidence, especially since the latter are more expensive, unoccupiable, and do not really work.

In thinking of the site as a clean slate, the designers even denied

themselves the tracings of topography and prior occupations, contingencies that could have given them a foothold, anchoring Chandigarh in a specific place. The segregation of the academic and the government complexes adds to the spatial anomie; closely integrated, they could have been both the drama and the decor of this bright new world. Instead, the Capitol complex lies beached in splendid isolation, turning its back on the little people while choosing to consort with the Sivaliks. In Chandigarh, the ascetic and prescriptive aesthetics of nation-building and high modernism joined forces to produce a modernist hair shirt that keeps the Indian id more or less in check.

It is India's most regulated city; signage, facades, even boundary gates have to follow regulations. (Though, not surprisingly, all these regulations sometimes seem only a ruse for forcing common citizens to get all their contraventions "regularized" through official or unofficial means). Here and there the Punjabi exuberance for decoration does make itself felt — in Sector 22's more intimately scaled markets, the squat round concrete columns are painted a glossy temple red, with serpentine signage coiling up them. Chandigarh is still a slow, dusty, official city (a community of choice for retired Sikh military officers) that only grudgingly provides the interstices for informal entrepreneurial activity — for the charpai's of barber stations, or the makeshift tables upon which laundry men set up shop with their heavy coal-fed irons.

Chandigarh is a vast vitrine, a container for a *tableau vivant* that both preserves and re-enacts the local through the global, and vice versa. Another vantage on Chandigarh, not the outsider's transcendent view but a local one from within the vitrine, is provided by Balraj Khanna's novel, *Nation of Fools*. The novel is a parable of Chandigarh as the locus of Nehru's Ram Raj; the city of opportunity and wondrous new things. It follows the fortunes of an Indian nuclear family (father, mother, and one son) as they move from a refugee camp and a marginal existence eked out at a bus stop in the middle of nowhere to business and social success in the new-fangled ways of the big city.

As the family assimilates and is assimilated into Chandigarh, the city becomes a living monument to India's ability to accommodate the alien, its strangeness now part of the Punjabi world-view. In a striking scene, Khanna incorporates Chandigarh into the vernacular and humor of Punjabi sensibility.

"What sort of houses are these cement boxes? Are they for people or pigeons?" asks Paro when she first sees Chandigarh.

"They got an Angrez (Englishman) to design them," she is told.

"Couldn't they get hold of an Indian?"

"The contractors were Indian."

"Then these buildings won't stay up for very long, I can tell you that."¹¹

NOTES

¹ As primary visionary of modern India, Prime Minister Nehru repeatedly had to defend the "great experiment" at Chandigarh. Malay Chatterjee, "Options after Independence," *Inside Outside* (February/March 1986): 22-42.

² Although this paradox marks practically all the early reports as well as the contemporary accounts, it has yet to be given the attention it deserves. What does it say about established notions of cultural purity and paternity when an emblematic event like Le Corbusier's Chandigarh may as easily be appropriated by Indians who otherwise have no place in the conventional arc of the history of modern architecture? This question is part of a larger study of the ways in which material culture informs cross-cultural encounters.

³ As a Pakistani national, my first order of business after checking in at the hotel was registering at the main police station. As they searched for a dusty file to record my particulars (I was, it turned out, the first Pakistani to visit Chandigarh in ten years), I got my first good look at Chandigarh's

architectural formulas. Both the hotel and the police headquarters were housed in identical five-storey concrete frame buildings, set at an angle along the main road to the Capitol complex — evidence of the blood-minded adherence to a grand plan for which Chandigarh's architects have been repeatedly castigated. While the hotel was kitted out in the manner of three-star hotels the world over, the police building was another affair. In the driving mid-winter rain, the unplastered concrete was a dark gray and water dripped everywhere; through the egg-crate louvers, the broken panes in the thin metal frames, and down open stairways. In the open entrance hall, the electricity meters crackled and in the corridor outside a wood fire burned.

⁴ Balraj Khanna, *Nation of Fools* (1985): 49.

⁵ The "7-V Rule" was a natural complement to the "sectors" that are the basic unit of Le Corbusier's remastering of the traditional city plan. Much of this research was carried out in the context of the Spanish cities of Latin America — for Buenos Aires, Montevideo, São Paulo, and Bogota. The 7-V Rule was based on the discovery that "with & types of roads the man of mechanical civilization could: cross continents (V-1); arrive in town (V-1); go to the essential public services (V-2); cross at full speed, without interruption, the territory of the town (V-3); dispose of immediate access to daily needs (V-4); reach the door of his dwelling (V-5 and V-6); send youth to the green areas of each sector where schools and sports grounds are located (V-7)." In Chandigarh a V-8 was created to accommodate bicycles. Le Corbusier, "The Master Plan," *Marg* (December 1961): 9.

⁶ Le Corbusier, *ibid*.

⁷ While Fry and Drew worked in Chandigarh from 1951 to 1953, Pierre Jeanneret stayed on in Chandigarh until 1964, working as a private architect, as head of the new Chandigarh School of Architecture, and as the chief architect of the State of Punjab. During this long association with a town and a region, Jeanneret both influenced and was influenced by local architectural patterns and construction methods. The authors are currently working on a monograph that traces the contours of this cross-cultural conversation.

⁸ The term used to describe Non-Resident Indians, especially those residing in America who bring back with them a very different sense of space, money, and entitlement.

⁹ The government of Punjab had produced this list based on what 10% of salary would "buy." Certainly class and other prejudices can be read into this list as well. In any event, to a designer this list presents a very challenging gauntlet. The three architects had to produce designs for free-standing houses (Types 3-7, built on lots ranging from 5,000 square yards to 1,000 square yards) to semi-detached units (Types 8-13, built on sites ranging from 500 square yards to 75 square yards). Even this taxonomy proved to be insufficient; another category (Type 14, at a cost of USD 500 per unit) was added to provide for those who fell out of governmental purview but provided the essential services that keep an Indian city going: the tonga drivers, sweepers, laundry men, etc. Norma Evenson, *Chandigarh* (1966): 49.

¹⁰ Charles Correa remembers the excitement: "All at once India was catapulted to center stage on the world's architectural scene. Overnight the things we could not possibly build in our climate and within the constraints of our economy (paper-thin Miesian glass boxes) were out. What was in was exactly what we could do best: in situ concrete, handcrafted formwork . . . an architecture of vivid color and deep shadow." Charles Correa, "The View from Benares," *Le Corbusier* (1987): 197.

¹¹ Balraj Khanna, *Nation of Fools* (1985): 123.

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