Franco Panzini

## Le Corbusier in India: Gardens, landscapes and the Chandigarh plan

The 40<sup>th</sup> Session of the World Heritage Committee of the UNESCO, held in Istanbul in July 2016, has named seventeen projects in seven countries by Modernist architect Le Corbusier to the list of World Heritage. Quoting Le Corbusier's inventive architectural language, UNESCO praised the collection of projects for "[reflecting] the solutions that the Modern Movement sought to apply during the 20<sup>th</sup> century to the challenges of inventing new architectural techniques to respond to the needs of society". Additionally the motivation points out the fact that: "These masterpieces of creative genius also attest to the internationalization of architectural practice across the planet." A statement that implicitly recognizes how important the practice of the voyages in the formation of architectural culture of the 20<sup>th</sup> century had been.

The Capitol Complex of the Indian city of Chandigarh is among the seventeen masterpieces of the modern architect constituting the transnational dossier submitted to the Committee for the nomination.<sup>2</sup>

Chandigarh is a city of more than one million inhabitants located in Northern India; it is the joint capital of the states of Punjab and Haryana. It is a prosper-



Fig. 1 Palace of Assembly in Chandigarh's Capitol Complex designed by Le Corbusier, 1951-1963 (photograph: Franco Panzini)

<sup>1</sup> UN News Centre, July 17 2016.

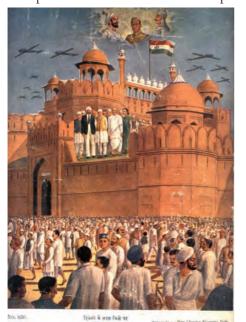
<sup>2</sup> The 17 sites comprising the transnational serial property are spread over seven countries and are a testimonial to the invention of a new architectural language. The list includes the Capitol Complex in Chandigarh (India), the National Museum of Western Art, Tokyo (Japan), the House of Dr. Curutchet in La Plata (Argentina) and the Unité d'habitation in Marseille (France).



Fig. 2 The Panjab University campus in Chandigarh and the Gandhi Bhawan pavillion designed by Pierre Jeanneret, 1961 (photograph: Franco Panzini)

ous city with a reputed university, several colleges, museums, and parks whose fame has been established in a relatively short time, its construction having been decided only in 1949. As a matter of fact, Chandigarh was conceived as an entirely planned new city, an iconic achievement of independent India and its history is deeply interlaced with that of India as an independent nation-state.

August 15th is a national holiday in India. It commemorates the nation's independence from the British Empire on the same day in 1947. Then, Jawaharlal Nehru, the first Prime Minister of India, raised the Indian national flag above the Red Fort in Delhi, and gave a speech on the destiny of the new nation. However, the jubilation was tempered by the bloody events taking place in those same days. Independence coincided with the partition of the former British Indian Empire,



which was divided along religious lines into two independent nations, India and the newly-created Pakistan.

Fig. 3 Unknown artist, 'Address to the Nation by Prime Minister Nehru on Indipendennce Day', Calendar, 1970s (Private Collection)

The partition was accompanied by a terrifying outbreak of sectarian violence and massive displacements. By 1948, more than fifteen million people had been uprooted, and between one and two million were dead in the terrifying outbreak of ferocity connected to these events.

The partition also caused immense administrative problems. In the northern territory of Punjab, the historical city of Lahore, the ancient Mughal capital of the region, found itself in Pakistan, leaving the Indian portion of the state without a capital city. For the Indian government it was imperative to identify a new administrative center, in a region that had been devastated by violence. In 1949 it was decided to build a new capital, its name would be Chandigarh, coming from Chandi, a goddess of the Hindu pantheon. One year later, the most influential European architect of that time, Le Corbusier was appointed the planning of the city. He decided to share the extremely challenging venture with his cousin Pierre Jeanneret, a trusted collaborator and partner since the 1920s.

Le Corbusier was not an obvious candidate to design the city, but his modernist vision appealed to Jawaharlal Nehru, who as India's first prime minister grasped for grand projects to express the faith of the nation in its future. When he visited the project on April 2, 1952, Nehru declared: "The site chosen is free from the existing encumbrances of old towns and old traditions. Let it be the first expression of our creative genius flowering on our newly earned freedom. Let this be a new town, symbolic of the freedom of India, unfettered by the traditions of the past." His words seem a visible means of breaking with a heritage of economic backwardness and colonial subjugation.



Fig. 4 Le Corbusier in front of an Air India airplane at the Kloten airport, Zürich, 1960 (photograph: René

<sup>3</sup> Jeryy Pinto and Rahul Srivastava (eds.), Talk of the Town. Stories of Twelve Indian Cities, Penguin Books India, Dehli 2008, p. 29.

Le Corbusier and Pierre Jeanneret embarked on their first trip to the Indian subcontinent on February 20th, 1951, taking an Air India flight from Geneva to Bombay. After a stopover in New Delhi they headed north, and on February 23rd they reached the site that had been chosen for Chandigarh. In the following years, under the contract with the Indian Government, Le Corbusier traveled to India twenty three times and stayed a total of more than two years, while Pierre Jeanneret settled in Chandigarh to supervise the construction works. Among these many trips, the most significant for the outcome of the future city was the first, during which the two planners discovered the site with its specific natural and cultural features.

Le Corbusier never went to an architecture school; his architectural education consisted of traveling He wrote of himself that travels "[...] had provided his education, opening doors and windows before him - into the future".4 Le Corbusier had begun traveling very early and since his youth he developed an exploring attitude towards the sites he visited. He used sketches, photographs and notes as tools for a deep understanding of the places and as a way to comment the relationship between constructed environment and natural set. Sketching and taking notes were for him a working method to translate the character of sites into design strategies.

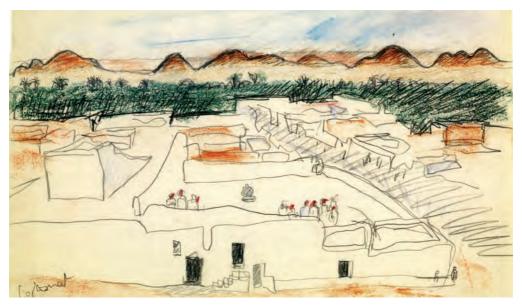


Fig. 5 The arab city and the oasis of Laghouat in Algeria, sketch by Le Corbusier (Album d'Afrique du Nord, 1931 (Fondation Le Corbusier, n.4955)

Speaking, as he often did, in the third person, Le Corbusier wrote: "At 19, LC sets out for Italy, 1907 Budapest, Vienna; in Paris February 1908, 1910 Munich, then Berlin. 1911, knapsack on back: Prague, Danube, Serbia, Rumania, Bulgaria, Turkey (Constantinople), Asia Minor. Twenty-one days at Mount Athos. Athens, Acropolis six weeks [...] Such was L-C's school of architecture. It had provided his education, opening doors and windows before him - into the future" (Le Corbusier, My Work, Architectural Press, London, 1960, p. 21).



Fig. 6 Cover of the Carnet E19, one of the four notebooks that Le Corbusier took with him during his first trip to Chandigarh in 1951 (Fondation Le Corbusier)

During his first trip to Chandigarh, Le Corbusier took with him four notebooks, now at the Fondation Le Corbusier in Paris.<sup>5</sup> Of these four notebooks, the *Album* Punjab is the only one solely dedicated to what will become the new capital. The others contain notes from previous projects and Le Corbusier will continue to use them in the following months and years.

They present very diverse annotations and a variety of sketches that seem to be in no evident order, but they report Le Corbusier's impressions of the site with its villages, inhabitants, animals, nature, and daily works seen while traversing the site by jeep. "We drive through the roadless countryside in a quite amusing jeep, brand new. But what a dance!",6 he wrote to his wife Yvonne. For example in the very first page of the Album Punjab, in an apparently inconsistent order and together with the misspelled name of the place, one finds: The first records about density and size that the new city should have had; a tiny diagram depicting the texture of crops; the sketches of an open air temporary furnace used for the extraction of molasses from sugar cane; phrases of admiration for the network of paths connecting the existing villages of the site. In other words, the notebooks offer the evidence of the architect's slow discovery of the 'genius of the place'.

The initial contact with the plain where the new capital was to be built left both Le Corbusier and Pierre Jeanneret in a state of euphoria. Jeanneret captured in his photographs that Arcadian world: a plain planted with grain and dotted with mango trees, groves and small rural villages, with a seasonal watercourse running along the site's central portion. In lyrical tones Le Corbusier wrote to Yvonne, "We

<sup>5</sup> The four albums are conventionally referred to as: Album Punjab, Carnet E18, Carnet E19, Album Nivola 1.

<sup>6</sup> Arnaud Dercelles and Rémi Baudoui (eds.), Le Corbusier. Correspondance. Lettres à la famille 1947–1965, T.03, Fondation Le Corbusier - Infolio éditions, Paris 2016, p. 166. Letter of February 25, 1951, from Le Corbusier to his wife Yvonne.

are on the site of our city, under a splendid sky in the midst of a timeless countryside. The villages are so old that they have no date. Everything is together: men, women, children, donkeys, beautiful cows, buffalo, dogs. Everything is calm, slow, harmonious, lovable and all speak softly and moderate."7

Pierre Jeanneret moved around snapping photographs, while Le Corbusier was taking notes and sketches on his notebooks. They both aimed picking up the spirit of that inhabited countryside, dense with social relationships and set in a natural scene of tranquil monumentality. Le Corbusier was captivated by the site's scenic potential. He found in the site's topography the matrix on which to anchor the layout of the new urban structure. Three features in particular were mostly admired by Le Corbusier: The regular order of the agriculture land; the seasonal watercourse that had carved into the plain a twisting glen; the striking background given by the Shivalik Hills, a mountain range of the outer Himalayas that enclosed the plain.

The geometric pattern of the fields was, since the beginning, part of the reflections on the future plan of the city. On the airplane that brought him toward Delhi he wrote: "From Bombay to Delhi, the immense earth is all cultivated with care, along with right-angled lines, but with a very mosaic pattern."8 And again on a trip to Ahmedabad, in March, he observed "Great cultures on a large geometric scale, with rectilinear boundaries".9

In the fabric of the Indian countryside Le Corbusier found a justification for the compact geometric form he was envisioning for the new city. The first ideas for the quadrangular grid that would give the city its distinctive character, appeared in sketches outlined between the end of February and the beginning of March 1951. But since its early genesis the geometrical urban grid is stirred to the elements of the natural landscape, mitigating its apparently abstract aspect.

From his very first sketches Le Corbusier envisioned the seasonal watercourse crossing the plane, the so called "vallon d'érosion", as the natural spine of the future capital. The stream and the vegetation of the creek made it an ideal site for a linear park that would run through the entire city and culminate in the Capitol, which in turn would be visually framed by the mountains on the horizon.

Nature would confer to the city both majesty and livability. It would also set the Punjabi capital apart from the unfriendly pomposity of a direct precedent for a capital city in India: New Delhi, that was planned by Edwin Lutyens and Herbert Baker, both leading 20th-century British architects, to replace Calcutta as the capital of British-ruled India.

<sup>7</sup> Arnaud Dercelles and Rémi Baudoui (eds.), Le Corbusier, 2016, p. 165. Letter of February 25, 1951, from Le Corbusier to his wife Yvonne.

<sup>8</sup> Carnet E19, fol. 41, Fondation Le Corbusier.

<sup>9</sup> Carnet E18, fol. 41, Fondation Le Corbusier.

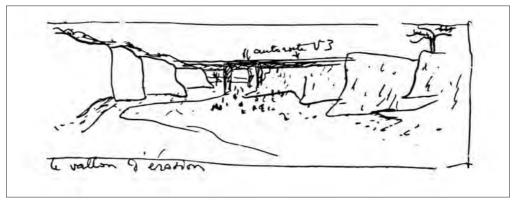


Fig. 7 Le Corbusier, 'Le vallon d'érosion', sketch (Le Corbusier Œuvre complete. Volume 5. 1946-52, p.116)



Fig. 8 Chandigarh, the stream in the linear park running through the city (photograph: Franco Panzini)

The purpose of making a clear distinction between the Chandigarh plan and that of New Delhi was strengthened on March 1951, when Le Corbusier went to New Delhi. In that occasion, commenting the monumental central axis of the city, one of the most striking feature of New Delhi's plan, Le Corbusier wrote: "The main road is despairing (length + empty lawns) [...] In Chandigarh you have to put the pedestrian in small valleys, picturesque winding paths."10

Following that statement Le Corbusier confirmed the simple creek he had discovered in the Chandigarh plain as a significant landmark. It was the birth of Leisure Valley, the linear park that would cross the entire city following the line of the trench. On its eastern border Le Corbusier placed the city's main street, running up toward the Capitol. He conceived this as a tree-lined boulevard. Its design was

<sup>10</sup> Carnet E18, fol. 36, Fondation Le Corbusier.

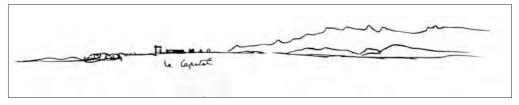


Fig. 9 Le Corbusier, 'Le capitol', sketch (Le Corbusier Œuvre complete. Volume 5. 1946-52, p.116)

inspired by the appearance of the road Le Corbusier traveled along from Delhi back to Chandigarh. As he wrote, "The road has [...] a magnificent plantation of huge and light trees that would be suitable here and there for our Capital Valley avenue."11

The master plan took shape very quickly. The new city was to be square in shape, with an adjacent rectangular area occupied by the Capitol complex, whose location took advantage of the presence of the mountains range, the perfect backdrop for the noblest elements of the city.

In the Album Punjab the architect made the first schemes for the orientation of the Capitol buildings, noting that they would have to be sited perpendicular to the mountain range so as not to block the view. 12 And this is, in fact, what happened on the Capitol esplanade, where both the linear buildings of the High Court and the Secretariat are angled toward the hills.

But the compositional scheme of the Capitol reveals another source of inspiration linked to the territory. On February 26th, Le Corbusier wrote to his wife:

"The sky is extraordinarily soft. The lawn is lined with the most beautiful flowers, the temperature is delicious. Instead of taking a tourist trip we work like madmen in this countryside dotted with only a few villages. Last night to relieve ourselves, we went to see the gardens of the Maharajah of Patriola (sic). What a look! Von, I tell you, I'll do here, finally the work of my life among the Indians, who are an extraordinary civilized people!"13

Using the jeep in which Le Corbusier and Pierre Jeanneret travelled along the territory of Chandigarh, on February 25th, in the evening, Le Corbusier went to Pinjore, a town located at a short distance from the Chandigarh site, to visit the Mughal-style Pinjore garden. It is a garden created in the 17th century by architect Nawab Fidai Khan, and owned at the time of Le Corbusier's visit, by Sir Yadavindra Singh, Maharaja of Patiala.

<sup>11</sup> Carnet E18, fol. 33, Fondation Le Corbusier.

<sup>12</sup> Album Punjab, p. 19, Fondation Le Corbusier.

<sup>13</sup> Arnaud Dercelles and Rémi Baudoui (eds.), Le Corbusier, 2016, p. 167. Letter of February 26, 1951, from Le Corbusier to his wife Yvonne.

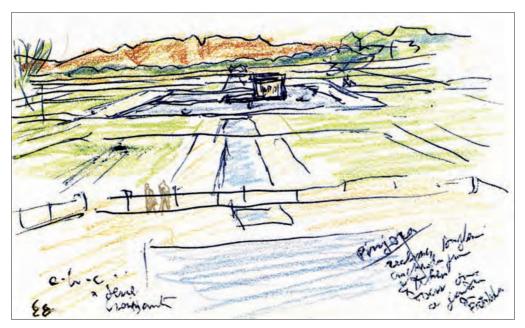


Fig. 10 Le Corbusier, Pinjore, sketch (Fondation Le Corbusier, Carnet E19, fol.33)



Fig. 11 Pinjore, the Mughal garden (photograph: Franco Panzi-

Evidence of Le Corbusier's visit to Pinjore garden is given also by his sketch depicting one of the pavilions in the garden.<sup>14</sup> The only annotations linked to the sketch are the date and the name "Patiala", a toponym that refers not to the site of the garden but to the old capital city of the princely state, where the Maharaja resided.

<sup>14</sup> Carnet E18, fol. 41, Fondation Le Corbusier.

A schematic plan of that garden, with the description "garden of the Maharajah of Patiala", appears also in the Album Punjab, with the date February 26th. The plan shows two quadrangular zones, each divided into four parts and placed along a central axis; the measurement of the larger section is given as 350 meters. 15

Surprisingly enough, on the next page of the same album Le Corbusier drew his first ideas for the Capitol complex of Chandigarh. He thought to group the buildings, the High Court on one side and all the others on the opposite, with a large, central open space in between. 16 The arrangement is based on a rectangular shape, formed from squares, each 350 meters long, echoing exactly the Pinjore garden measures, and even its geometrical layout.

The garden of Pinjore, with the regularity of its planimetric rhythm and its central axis turned toward the mountains, directly inspired Le Corbusier in his plans for the configuration of the Capitol Complex in Chandigarh. Le Corbusier returned to Pinjore, which appears in a later sketch with the note "growing series", apparently referring to the modularity of its partitions. <sup>17</sup> He continued also to evoke the garden in the years that followed, in his design for the Capitol park, which was never realized.

The Mughal gardens, with their geometric grid and structured according to the notable elements of the landscape, continued to attract Le Corbusier during that first trip to India. In Delhi he visited the interior garden of the Red Fort and during his meeting with Nehru and a reception in the presidential palace he was able to see the Mughal-style garden designed by Lutyens. He left one sketch of it, showing the garden's water axis directed toward the west, the distant mountains, and the sun setting behind them. He noted: "Garden in the Mongol style, the sun

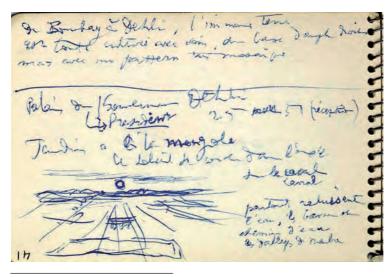


Fig. 12 10 Le Corbusier, 'Jardin à la mongole', sketch (Fondation Le Corbusier, Carnet E18, fol.41)

<sup>15</sup> Album Punjab, fol. 31, Fondation Le Corbusier.

<sup>16</sup> Album Punjab, fol. 33, Fondation Le Corbusier.

<sup>17</sup> Carnet E19, fol. 33, Fondation Le Corbusier.



Fig. 13 Chandigarh master plan, April 1951 (Fondation Le Corbusier, n. 29060)

is setting in the water over the channel, everywhere shining water." Of the entire immense achievement of the capital of the British Empire, Le Corbusier seemed to appreciate only, what was happening on the surface of that watery mirror: A simple play of reflections that inserted the garden into the natural order.

The definitive master plan of the city of Chandigarh was finalized shortly after Le Corbusier's return to France, but the architect did not forget the strong feelings and intuitions of that first trip. The entire Chandigarh site had its own genius loci, which Le Corbusier celebrated integrating the spatial value of the architecture with the symbolic value of the natural environment and the memory of the great gardens of the region.

Le Corbusier's voyages to India, starting with that first exploration in 1951, have therefore played a salient role in the design of Chandigarh, but they give also an extraordinary evidence of the method of work of Le Corbusier, a man deeply empathetic to sites. No coincidence that the dossier submitted to UNESCO for the nomination of the architectural work of Le Corbusier opens with a presentation of the prominent Indian architect Balkrishna Doshi, who points out that brilliant ability to Le Corbusier to capture the identity of places, through their explorations.

"For him discovery had to happen at all scales, simultaneously and without constraints. References from earlier works were only references and the thrust was on an approach suitable to India where the vision had to match not only aspirations of a free India but also the availability of skills, techniques, resources and relate harmoniously to the eternal cosmic cycles, cosmic elements and the resulting life style that he had witnessed in his journeys.

To the professional fraternity and Indian society at large Le Corbusier through his works shows us how to rediscover our own identity, how to reconnect our works and the life styles and how to integrate natural laws, in our daily life. In short, there is no style, nor time, nor product, it is a creation similar to nature which evolves and simultaneously take roots. All the above signals are our guidelines and if we follow them we will remain as fresh as our very ancient monuments that we admire."19

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Fig. 14 The Chandigarh's Capitol Complex designed by Le Corbusier, 1951-1963 (photograph: Franco Panzini)

<sup>19</sup> L'Oeuvre architecturale de Le Corbusier. Une contribution exceptionelle au movement moderne, Brochure of presentation of the proposal for inscription on the World Heritage List, Fondation Le Corbusier, Paris, 2015.