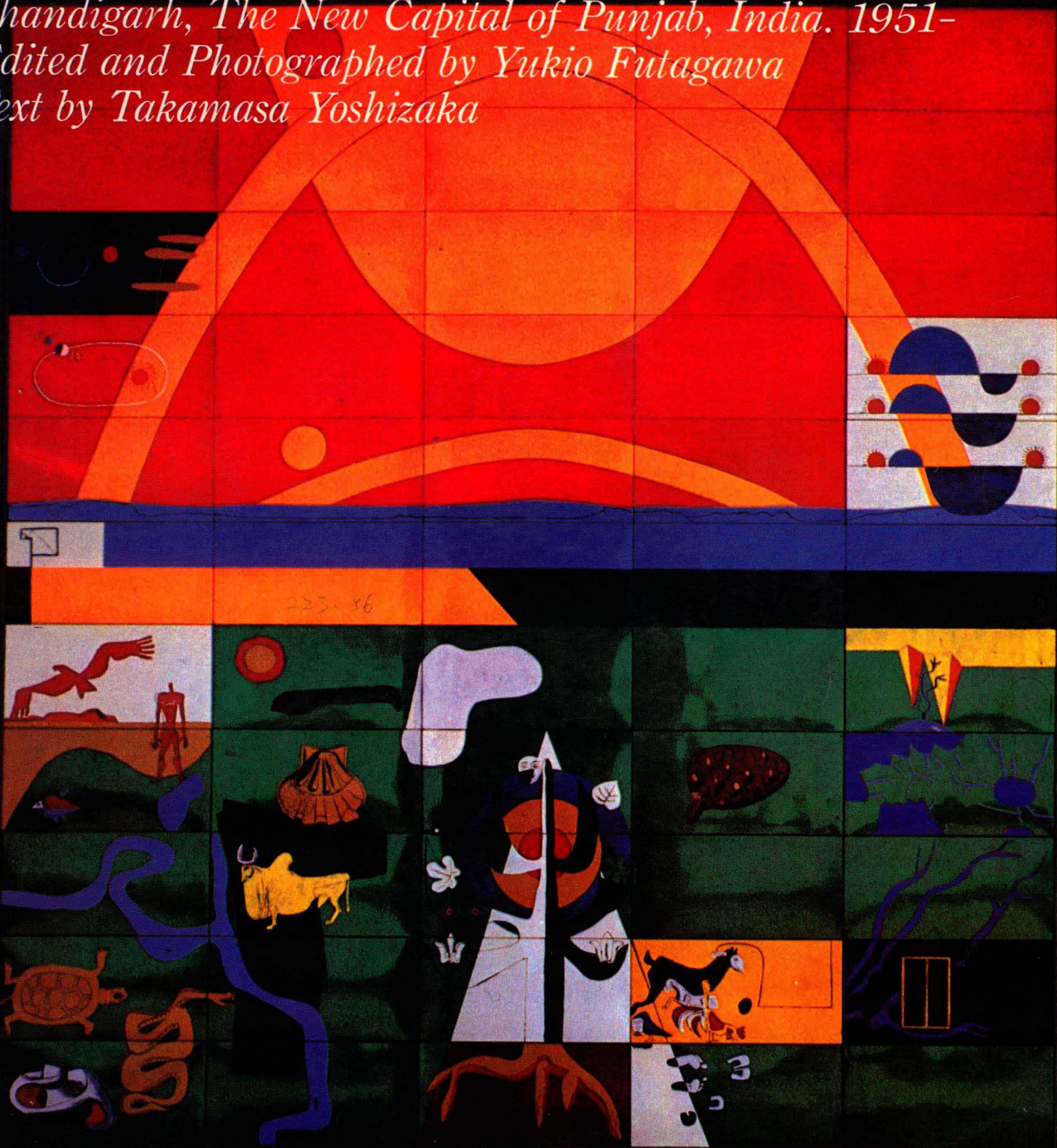


世界建築

*Chandigarh, The New Capital of Punjab, India. 1951-
Edited and Photographed by Yukio Futagawa
Text by Takamasa Yoshizaka*



Global Architecture

世界建築

世界建築 No. 30
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建築師 / 勒·柯比意
攝影 / 二川幸夫
本文 / 吉阪隆正
中譯 / 曾梓峰
審訂 / 浩群建築師：蔡榮堂 陳乃城 黃模春 楊逸詠
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胡氏圖書

香地葛：有關柯比意如何處理其作品之思考 —— 撰 / 吉阪隆正

Chandigarh: A few thoughts on how Le Corbusier tackled his work by Takamasa Yosizaka

法院大廈基礎的開挖.....

時間是1952年的晚秋，我第一次往訪香地葛。旁遮普省未來的首府就要蓋在這裡。那時我仍是個窮學生，從德里來，所能負擔的也只是搭乘四等車廂的夜行火車。我和一大群無票乘客擠在同一個車廂裡，他們裹著毛毯，在寒夜中顫抖著。車廂裡每一寸可能的空間都被佔滿了。由於對當地的一些習慣並不了解，我打算讓出一些可以休息的空間給我週圍的旅客，可是一位善心的人警告我，他說：「你是買了票的，所以你有優先權，儘可以大大方方地躺下。可是如果有人坐在你曲腿所空出來的地方，你不要一脚把他踢開。」每一次，火車在沿途的車站停下時，一大群人就會下車，當火車開動時再跳回來，我才知道這些都是沒票的旅客。

約末是清晨四點的時刻，大地仍是漆黑一片，天空中也還滿佈著星辰，仍然是那個善心的人告訴我，如果要去香地葛，我就必須在下一站下車。說真的，我並不太相信他的話，可是還是收拾好我的行李半信半疑下了車，和我一起下車的還有另外一兩位旅客。我們站在蒼茫的荒野中，極目向四週無邊的黑暗中望去，隱約中好像看到一棟小房舍，可是却沒有一個窗戶透出光線來，在這個時候，火車已經開動，駛出了車站。

我們彼此是陌生的，可是由於都在同一個地方下車，在不知不覺中彼此產生了一種親切感。其實就算不是在同一個車站下，我們仍有同車之誼呀！他們其中一個說道：「天就快亮了，我們可以先到那棟房子裡喝點茶，你可以喝完茶再動身。」

清晨稍後，我搭上了一輛西行的卡車動身前往香地葛，那時

DIGGING ON THE COURT-HOUSE SITE

It was toward the end of autumn, 1952 that I first visited the place where the future capital of Punjab was to be built. Since I was a poor student then, I could only afford a train journey by night, fourth class, from Delhi. I shared the carriage with a multitude of non-paying passengers who, wrapped up in blankets, were huddled up, shivering from the cold of the night, occupying every pocket of space available on the floor. Totally ignorant of the local code of behavior, I tried to offer some resting space to a nearby fellow traveler, when a kind man warned me, saying, "You've bought a ticket, so you go ahead and rest comfortably. But if someone sits into the space created by your bent legs after you lie down, you must not shove him away." Each time the train stopped at a station on the way, a multitude would get off and jump back on when the train began to move. These were the non-paying travelers, I realized.

Could it have been about 4 o'clock in the morning? It was still pitch-dark, and the sky was star-strewn. The same kind man told me that, if I was going to Chandigarh, I should be getting off at the next station. I was somehow not quite convinced, but I pulled my luggage together and got off. One or two other passengers got off with me. We stood in the middle of nowhere, and as we forced our sight through the enveloping darkness, we discerned something like a hutment. But there was no light coming from any opening. In the meanwhile, our train had puffed out of the station.

We, strangers to each other, spontaneously developed a sense of propinquity from the fact that we had gotten off at the same place, if not at the same station; we were, so to speak, on the same boat. "It'll be dawn soon," said one of them, "and we can have a sip of tea in that building. You can start moving after your tea."

It was only after I had started heading due west aboard a truck later the morning that I realized I was on the farther side of the dry river flowing on the east side of the future city, that plot situated to the extreme right of the map I had become completely familiar with.

我才知道，這個地點就位於那份我所熟知的地圖的最右端，也就是流經將來市區東側的一條乾涸河川的對岸。滿佈著灰塵、看起來灰濛濛一片的行道樹沿着我們所走的那條路排列著，這條編號為V的路路，是通往香地葛的第一條幹道，對我們所走過「V」道路系統裡的那七種道路，我的記憶仍是十分鮮明的。最後我們終於來到了中央的廣場。

一個白色的標識牌突然出現在我們眼前，上面寫著「首府計劃」幾個字。在前面不遠的地方，有一棟帶有一排黃色拱圈的房子。在行道樹後面，我則發現有幾棟一層樓的白牆建築物。

現場的二個計劃人員：皮爾·堅尼瑞、麥斯威爾·佛萊、珍·卓爾就待在這些房子裡面。我安頓好行李，一刻也沒耽擱就出發去察看首府的這個基地，中央行政大樓將建在那裡。太陽已經爬得很高了，雖然是十一月天，但走這段路仍讓我滿身大汗，地面上整整齊齊、成行成列的殘莖告訴我們收割才剛剛結束；一望無涯的黃色大地，散佈著三三兩兩的牛群。人工堆起來的平台旁邊是一個個水池，附近則有一些泥土房子矗立著，整個景象的正中間有一棵巨大的菩提樹，在地面上投出一片陰綠的樹影，它的旁邊有一座石砌的水井。

牛車已經準備好了，從摩漢周考古場挖掘出來的遺物中我們可以發現，它和幾千年的樣式相同，並沒有多大的改變。六千多年來，這個地區的一種本質上一直不變的生活形態已經被保留下來了。只要水源不虞匱乏，土地將一直是肥沃的。

基地北邊，橫陳著柯比意草圖中以綠色淡描出，在喜馬拉雅山腳前展開的小山丘，其山腳下則是一個棕色的小斑點——那是

Dust-covered, gray-looking trees lined the road we were following, the road which, code-named V2, was to be the first trunk road of the city of Chandigarh. I still remember rather vividly the seven segments of the V system we passed. Eventually we came out to the central plaza.

A white placard carrying the writing, "Capital Project," casually stood there. Further ahead, there was a building with rows of yellow arches. Behind the road-side trees I discerned a few white-walled single-storied houses.

Pierre Jeanneret, Maxwell Fry and Jane Drew were working on the project staying in these houses. I deposited my luggage and lost no time in going to see the Capitol site where the central administrative building would be situated. The sun had already risen high, and, although it was November, walking made me perspire. Regular rows of stubs on the ground showed that harvesting had just been finished; the whole place was a yellowish expanse of land with cows resting sprawled here and there. Beside artificially heaped-up platforms were pools of water. Earthen farm-houses stood in the vicinity of such places. In the middle of all this scene was a giant banyan tree, casting a cool shadow. There was a stone-rimmed well right beside it.

Ox-carts, familiar to us from Mohenjo-Daro excavations, lay ready for service. For over six millenia, an essentially homogeneous life-style has been preserved in this region. So long as water is available, the earth here continues to be fertile.

To the north, exactly as we had seen it in Le Corbusier's sketches, unfolded the faintly greenish hill at the foot of the Himalayas. And at the foot of this minuscule hill was a small speck of brown: a crowd of people busily at work on the site. Poles with white cloth pieces tied to their tops stood here and there.

When I arrived at the foundation-laying scene, it had just turned lunch time. The crowd made up of women in red and yellow saris, half-naked men, small children, etc. had broken down into family

一群人在基地上忙碌的工作著，頂上繫著白布條的標杆則到處樹立著。

我到達基礎開挖的現場時正好是午餐時間，這群由穿着紅色或黃色紗麗裝的婦女、半裸的男人、和小孩子們所組成的人群已經打散，回到自己家人的地方共進午餐，他們吃着咖哩和其他的飯菜，食慾都非常好。我四處察看，發現在每一個挖掘的洞中央總會有一個殘留的土堆，這個土堆是工作完成後計算工錢用的憑據，也就是說，工錢即是根據土堆的大小發放。男人挖掘洞孔，女人則以竹籠盛土頂在頭上來搬運泥土，一隻手提着長紗麗裝的下擺，以免妨礙了走路。這種方法比用有軌道的推車來搬運還要有效率。

白紙上作畫的困擾.....

我陷入對一種景象的沉思裡，其所以如此，是因為我得根據勒·柯比意記憶中的一種景象所佔的一些片斷描述而用我自己的方式再將它重新組織起來。那景象在他第一次拜訪香地葛後就在他腦海裡不斷縈繞了。面對這樣一個歷史悠久的農村，而要建一座完全新景象的首府，想必他也手足無措吧。完全沒有任何線索可以作為開始的依據。喜馬拉雅山和人類世界比起來是太大了，人好像是住在他的肚子裡。

用什麼樣的形式才能將現代西方文明中的合理、效率或其他的功能灌輸進來呢！他明白，以前在南美、非洲以及歐洲所有針對都市計劃所提出來的建議，皆是針對當地充滿矛盾的生活施以外科手術。

units for lunch. They were eating chapati and other dishes with great appetite. As I looked around, I noticed that each hole being dug had a tower of soil left untouched in the middle. This tower was a precious witness to the amount of work accomplished. It was, so to speak, a pay scale indicator for each unit of work. The man dug the hole, and the woman carried the soil in a basket which she balanced on her head. She would gather up with one hand the hem of her long sari so it would not hinder her walking. This method was more efficient than the use of a railed lorry.

THE PERPLEXITY OF DRAWING ON BLANK PAPER

I dwelt above on the landscape I ran into because I wanted in my own way to recreate on the authority of Le Corbusier's casual remarks made later, the scene which hailed him when he first arrived there. Before a time-honored farming village, he must have been at a loss in proceeding to draw up plans for a totally new capital to be built there. There was absolutely no clue to what he could begin with! The Himalayas were simply too large-scale when compared against the world of human beings. People lived in their bosom.

In what form could he implant rationality, efficiency and other functions of modern Western civilization in this place? He became aware that, in Latin America, or Africa, or Europe, all the drastic proposals he had made for city-planning were made to apply a surgical scalpel to the internal contradictions accumulated in city life.

But here in Chandigarh, things were different. Here was a world which represented a state of stable stagnation with a depth of time of 6,000 years behind it! The various manifestations of human contradictions were buried in nature in precisely the same form in which they arose. Le Corbusier was, so to speak, given the task of drawing freely the image of a totally new world on a sheet of blank paper.

The perplexity he felt found expression in such grievances of his

但在香地葛，情形不同了，六千年的悠久歷史，使這個地區呈現一種安定停滯的狀態。人類矛盾的不同表徵却都隱藏在相同的形式裡。在這裡可以這麼說：柯比意是嘗試在一張空白紙上自由的畫出一個想像的新世界。

他的困擾正可以用他的一句牢騷話來說明：「沒有任何限制完全自由的去做一件事是痛苦的。」對於有複雜狀況的場合，他是一個絕佳的問題解決者。用一種類似演繹的手法，他總是先給予問題簡潔的答案，然後在工作的發展中再以深思熟慮的細部加以潤飾。但在香地葛，他却無法找到任何可以作為依據的起點。

有關他起初是怎麼牽入這個計劃，這裡有一段不為人知的小插曲。由於當時我並不在場，對於這個別人告訴我的傳聞，我也無法向各位讀者保證它的真實性。據說當初印度政府是委託一位美國建築師規劃的，他不久便提出了一份以美國汽車社會為藍本的方案。印度政府並不十分確定要如何評估它，便把這個案子拿給勒·柯比意看。於是這位法國建築師說了：「你們得了解，我不能批判別人的設計案，如果你們真的想要我的意見，這件工作就交給我來做。」如果事情是由這麼一種態度開始的，那柯比意對整個構圖工作非得比平時更認真不可。

他的尺度理論——模矩，源自人體的比例及步行距離的尺度，終於面臨真正大規模尺度設計的挑戰。讓我們從藍色系列中挑出幾個數字，449、727、1177馬上呈現在我們心裡，把它們加上道路的寬度，我們得到下面兩個數字，800公尺和1200公尺。而這個數字成了都市街廓劃分的標準。但柯比意對這兩個數字還不是很有信心。後來有一次，我有機會帶他遊覽京都（日本）的

as, "It's a pain to be completely free from all restrictions!" He had excelled as a problem-solver in situations where complicated conditions prevailed. He would always come up with neat and concise answers and flesh out well thought-out details later as the work progressed, in some sort of a deductive fashion. But at Chandigarh, he could find no decisive starting point!

There is one little suggestive episode about the origin of his involvement with this project. I was not present at the scene, and I cannot guarantee the reader the veracity of the story which was later told me as an *on-dit*, but it was said that at first the Indian Government had approached an American architect, who in due course submitted a blueprint drawn up on the model of an automobile society. The Indian Government, not quite certain of how to evaluate it, referred the proposal to Le Corbusier. Whereupon the French architect said, "Look, I cannot criticize other people's plans. If you really want my opinion, let me do the job." If the whole thing had started in this manner, Le Corbusier would have had every reason to be all the more serious about the whole composition.

His measurement theory known as the Modulor, which had its origin in the measured proportions of the human body and the world of the walker, now stood before a challenging test on a really large scale. Let us pick out a few figures from the blue row: 449, 727 and 1177 immediately come to our mind. Adding to them the widths of roads, we obtain such figures as 800 m and 1200 m. These would set the norm for city quarter partitioning.

But Le Corbusier was not quite confident. When I had an opportunity later to show him through the streets of Kyoto, he learned that the city-quarter partitioning of Kyoto is based on the ratio of 800:1200, and he looked profoundly satisfied. The confirmation of the validity of his theory appeared to stimulate his self-praise considerably.

Throughout the Chandigarh project he would carry around

街道，當他知道京都街廓劃分的比例是 800：1200 時，他看起來深覺滿意。理論正確性的證實似乎讓他感到十分的自豪。

整個香地葛規劃過程中，無論他走到那裡，都會隨身帶着保存在膠卷罐裡的自製模矩尺。但有一天，當坐在吉普車上巡視基地時，他不小心把它遺失在某一個地方了。對這件事後來有人說：「柯比意的模矩被種在香地葛的土地裡了。」

在早年到拉丁美洲訪問的時候，柯比意收集了許多有用的想法。如當地傳統城市中，使用正方形作為分割街廓的手法，而這些曾實際的應用在波哥大計劃案裡。因此，即將出現的模矩觀念已經潛藏在他的心裡了，剩下需要解決的只是尺寸的問題了。

但這種從南美洲學來的方法並不能直接應用在首府建築群裡，他先在心裡畫了一個 800 公尺見方的正方形。著名的商店街，東京的銀座，由八個街廓組成，每一個都差不多有 100 公尺寬。800 公尺似乎意味着一種結論，它是商店街等自然生長所能達到的最大距離尺度。有趣的是，我們可以注意到，這個長度又差不多是英制單位一英哩長的一半。一條 800 公尺的商店街穿過住宅區，在一種所設定的情況裡當然是座落良好。但在中央行政部門複雜的涵構裡，800 公尺可能太長了。它是沒有經過試驗的數字。

為了解決這個問題，他把兩個 400 公尺的正方形邊靠邊連在一起。他早先曾作了一個類似的試驗以證實這種模矩的正確性。私底下他必然很期望能再有一個奇蹟會實現。他於是把這兩個的正方形的切線邊放在他心中一直念念不忘的那個 800 公尺正方形某一邊的中央部位，結果是一個漂亮的設計。

with him, wherever he went, his hand-made Modulor role kept in a film can. But one day, while touring the site in a jeep, he unfortunately dropped it somewhere. This “incident” was later reported thus: Le Corbusier’s Modulor sown into Chandigarh soil.

On his earlier visits to Latin America, Le Corbusier had gleaned useful ideas from local traditional city-partitioning methods based on the use of the square which he actually used in his Bogotá (Colombia) plan. Thus, the concept for his forthcoming Modulor was already latently present in his mind. What remained to be solved was the problem of dimensions.

But this approach he learned in Latin America would not apply to the Capitol building complex. He first drew in his mind a square of 800 meters. As that famous shopping street Ginza in Tokyo consists of eight blocks, each of which is approximately 100 meters, 800 meters appears to represent the conclusion more or less spontaneously reached as to the maximum length of shopping streets and similar stretches. It is interesting to note that this length roughly corresponds to half a mile in England and America. 800 meters of a shopping street running through a residential area, then, “sits well” in the given circumstances, but in the context of a central administrative complex, 800 meters might be too long; it was an untried figure.

For the purpose of solving this problem, he put two squares of 400 meters touching each other on one of their sides. He had done a similar experiment earlier to confirm the validity of his Modulor. He must have secretly expected that a miracle might materialize once again. He then superposed the tangent side common to the two squares on the middle portion of one of the sides of the square of 800 meters he had in mind. The result was a beautiful design.

The three powers of administration can be arranged within these lines, he thought, and the rest was a matter of architectural design.

他想，如果將三個行政部門都能安排在這些四方形裡面，剩下的就都是建築設計要解決的問題了。

面對傳統的式樣.....

計劃中最早興建的一項就是法院大廈，其中包括了八個法庭，一個最高法庭以及秘書處。

但這種大廈要蓋在那裡呢？當然，風向和日照為這個問題的答案提供了有用的線索。但問題是這棟房子在這片廣袤的土地上如何和其他的建築物建立起關係呢？對於這個問題，柯比意曾在「模矩」第二集裡寫道：

「決定大廈位置的時候，視覺問題成了決定性的關鍵。我立了一些 8 公尺高的旗桿，桿身交替漆着黑色和白色，桿頂繫着一面白旗。這樣做是為了使基地的地形地貌能更完全表現出來，建築物的轉角設置了黑白桿作記號，這麼一來就注意到建築物之間的間隔離得太開了。在這種漫無限制的土地上，我不得不在非常不安定和痛苦中作決定。喔！多麼痛苦的自言自語，我孤獨無助的自我評價，自作決定。問題的解決不再是根據理性，而是全靠感覺。香地葛並不是那種王公貴人住在城牆裡而老百姓擁擠在一邊的城市。我必須去填滿一個大平原。幾何的手法事實上是一種知性的雕刻。手上沒有黏土可以試作，也沒有實際的例子能在我作決定時給我一點精神的支持。我處在一種數學性的緊張中，除非建築物能完工，否則看不出其數學性特質。適當的位置，適當的距離，然後適當的評估，我在黑暗中摸索，就好像一場沒有頭緒的空間戰爭。算術組織、幾何以及一切一切，當工程都完工後

CONFRONTATION WITH TRADITIONAL STYLES

The first item of the project was the Palace of Justice. It was to be composed of eight Courts of Justice and one High Court, plus the Secretariat.

Where should this palace be situated? Of course, the constant direction of the wind or the direction of the shades could provide useful keys to answering the question, but there is also the question of the relationship in which the building must be built to other edifices on the extensive tract of land. On this subject, Le Corbusier wrote in Modulor II:

“The question of visual sense became decisive when it was time to determine the location of the Palace. We erected 8-meter-high posts, painted alternately black and white and with a white flag atop each. This was to complete the first phase of occupation of the terrain. The corners of the Palace were signaled with black and white poles. At this point, I took note that the buildings were a bit too far apart. It was with great uncertainty and agony that I made decisions on this boundless terrain. Oh, such a pathetic soliloquy! I was alone and unaided in evaluating and making decisions. The problem had nothing to do with reason any longer; it was all a matter of sensation. Chandigarh is not a city of tycoons, princes or kings enclosed within walls and the neighbors crammed together. I had to occupy a plain. Geometric manipulation was, indeed, an intellectual sculpture. No clay in hand to try it out. No mockup to give me a moral support for my decisions. I was in the middle of a tension of mathematical nature which would not yield fruit until the structures were completed. Correct point, correct distance, and then evaluation. I was groping in the dark. It was like a battle of spaces broken loose in the head. Arithmetic, texture, geometry and all will be there when the work is finished! But for now, cows, oxen and goats are crossing the fields scorched by the sun, led by peasants....”

He applied arithmetical-diagrammatical, i.e. intellectual sculpture to decision-making concerning the walls as well as sections of the

，它們就都在那裡了，但現在，炙陽高照的旱田裡光有農人們趕着散在四處的母牛、公牛及山羊……。」

建築物立面、剖面尺度，他是使用算術的圖形，也就是知性的雕刻手法來作決定的。他必然曾受阿拉伯傳統建築中伊斯蘭遺產的影響。在這些遺產裡，幾何和數學的訓練曾經大放異采。

在構圖時，他使用正方形作為構成的單元，利用模矩的原則，他把一個正方形併上另一個正方形，再在這兩個正方形中放入五個正方形，五個正方形裡再放入八個小正方形和一個大的正方形。但這樣必然會留下一小塊空間是多餘的，所以得替它安排一個好的用途。在這種態度下他的構圖概念開始呈現出一個清晰的形態。比起機能主義，形式上的問題更優先被重視及考慮。機能對柯比意而言只是一種激發因素而已。

當設計秘書處的時候，每次到最後他們開始處理機能組合單元時，他總是說：「現在，從這裡開始，我們要進入建築的王國了！」但這句話也顯示了，在開始處理機能組合單元之前，他已經很清晰明瞭的把形式的概念表達出來。從這裡，我們可以很自然的認識建築的基本立場，從一開始構架的構想到最後的裝修都是很重要的。機能的問題只是過程中用來審核控制的事項而已。人們可以說建築物使用的方式隨着時間而改變，而我們却不能因為改變的發生就每次蓋不一樣的建築呀!! 如此更說明了，以良好的比例決定空間的形式之重要性。這也是一個大城市設計中的最重要因素。

在香地葛，我最喜歡的是這裡第一棟建成的法院大廈，建築物前面那兩個後來加建的水池，池裡反射着建築物，把建築物的

building. He must surely have worked under the influence, if indirect, of the Islamic legacy in the traditional architecture of the Arabs, where geometry and other mathematical disciplines blossomed to wonder.

He used squares as constitutive units of schematic arrangement. Using the principles of the Modulor, he attached a square to another square. He then placed five squares in the two squares, and, in the five squares, eight squares and one large square. But this would leave a plot of space unaccounted-for. So it would be put to some good use. In this manner, his compositional concept began to assume a clear shape. Rather than functionalism, respect and consideration for form was given priority. Function, Le Corbusier reasoned, was only a motivating factor.

When working on design at the Secretariat, each time he gave the final touch to a functionally coordinated unit, he would make a point of saying, "Now, from here we enter the realm of architecture." But this presupposed that, before starting to work on the given functionally coordinated unit, he had already formulated distinct ideas about form. From here one would logically assume the stand that in architecture, concepts for the framework and finishing are all-important. It may be that the functional aspect is only an object of interim check. After all, one could say, the manner of using the building changes with the times. But we cannot build different buildings each time such changes take place. This brings in relief the importance of the form which, supported by agreeable proportions, makes up a fixed space. This will be a very important factor in larger cities.

At Chandigarh, I best of all like the Palace of Justice which was the first edifice to be built there. The pond, which was built in front of it later, reflects the building, duplicating the scene of the building in a marvelous manner, in a manner somehow reminiscent of the spirit in which two squares were placed side by side at the stage of concept finalization. My attachment to this building may

倒影襯得閃耀生輝，這景象讓人回憶起構思階段時那兩個邊靠邊放着的正方形意念。我之所以心慕戀着這棟建築，大概就是從這些記憶中滋生出來的吧。

加一個水池的構想，好像是柯比意在印度全國各地訪問時偶然獲得的靈感。在人工造景中給一個小水池賦予生命，印度人已經證明他們使用這種手法的能力是很獨到的。在全國各地有成千上萬這樣的例子，不知這些靈感是不是印度人從雨季後地上所留下的水澤中得來的。有一次當我要前往香地葛時柯比意告訴我，要我找個機會去看看卡爾卡庭園。這似乎告訴我，香地葛水池的靈感的主要泉源可能是從卡爾卡得來的。這樣也不必大老遠的跑去看泰姬瑪哈陵墓前的水池了。

遮陽板，這這棟建築立面顯要的特色，表現得像主旋律一般，這種手法在早期馬賽公寓的陽台仍帶點遲疑畏縮，到了南特公寓時已經深具信心的大膽使用了。印度人喜歡蹲在遮陽框架中小睡一番，很生動的構成一幅圖畫。這種情形很成功的適應而變成印度本地生活的主要部份之一。

掛在法院牆上那塊織氈是監獄裡在押的犯人做的。上面靈秀不凡的圖案依稀來自廊香教堂瑤瑤畫的回憶。簡單的說，這棟建築物可以視為他這麼多年來創造性的思想及經驗的累積或綜合，而從它們之間密切的關係如何散發出這般深邃迷人的魅力，可能永遠是個秘密吧！

自阿爾及爾計劃案以來的執意.....

1930年代初期，柯比意很幸運的獲得了阿爾及爾港灣的再開

stem from such memories.

The idea of adding a pond, incidentally, seems to have to come to Le Corbusier's mind during his visits to various places up and down India. Indians have demonstrated no ordinary talent in giving life to the presence of ponds in artificial landscapes. There are innumerable examples of it. I wonder if the Indians may not have gleaned the idea from the omnipresence of little pools of rainwater monsoons leave behind. Le Corbusier once told me that, when I visit Chandigarh, I should avail myself of the opportunity to go to see the garden of Khalka. It dawned on me that the main source of inspiration for the pond at Chandigarh may have been right here at Khalka. It was not necessary to go all the way to Taj Mahal.

The brise-soleil, which is a salient feature of the façade of this building, was used as an expressive leitmotif here, following initial hesitant use of it in the porch of the Marseilles unité and later confident use of it in Nantes. Indians enjoying an afternoon nap, huddled up in brise-soleil frames, most eloquently prove, and in such a picturesque manner, that this implantation has been successfully acclimatized and has become an integral part of local Indian life.

The piece of fabric hanging on the wall of the court was woven by prisoners in detention. On it is a design of highly spiritual nature, much reminiscent of the enameled drawings at Ronchamp.

In short, this building may be regarded as an accumulation, or perhaps a synthesis, of long years of his creative thought and activity in the past, and this may be precisely the secret of the particularly profound impression of charm one receives from communion with it.

OBSESSION SINCE THE ALGIERS PROJECT DAYS

In the early 1930s, Le Corbusier was brought by fate into involvement with a redevelopment project for the harbor district of Algiers. He was in the highest of spirits then, having digested a number of housing projects and participation in the design competi-

發計劃的設計權。那是他最志得意滿，情緒高昂的時期。不但主持許多集合住宅的計劃，並參與了國際聯盟總部大廈的設計競圖。那時他就已經預見了高層商業大樓的發展潛力。不久以前一批在當時他和朋友之間往來的信函文件被發表公諸於世。這批文獻生動的表現出當時柯比意是多麼的沉潛在阿爾及爾計劃案中。這批文件最後幾天的信中表示，柯比意對他的努力以及奉獻沒能實現感到很哀傷。他對這一計劃經數年的時間不斷的加以修改。他必定曾對自己發誓，將不會看到自己的計劃活生生被葬送掉，他一定要給他們一個機會，香地葛給了他和他的計劃一個實現的機會，香地葛計劃所預見的是一個容納各行政部門的巨大結構體，裡面容納了超過三千個人上的公務員，是一棟 254 公尺長，42 公尺高的大建築物。總共有七個部門被放在一起，共立了 63 個大樑以及 252 根柱子。最後的成果好像他在阿爾及爾設計的大樓橫着擺一般。

在這裡，柯比意的模矩很自然的再度主宰了基本的尺寸。然而，如果全部用同樣的尺寸它可能只有助於決定柱間和立面那愉人比例而已，而 254 公尺長的正面重複同一個模式會讓整個立面變得很單調。但實際上由於彼此間有 2 : 1 的關係，以藍色系列和紅色系列所組成的模矩，不但減低了單調的可能，並加強了巨型建築的尺度感。

當然，當他在進行阿爾及爾計劃案時，他的模矩尚未發現。但整個計劃裡他已經到處用 1 : 2，1 : 3 這種比例了。由於比例的運用而打破了僵硬的規律，產生了一種親切的感覺，對於今天那些開始侵擾日本都市，只考慮商業利益，沒有表情而火柴盒

tion for the League of Nations headquarters. There was the prospect of realizing highrise business quarters. Some time ago, letters and documents exchanged between him and his friends about this time were brought to light. They vividly illustrate how deeply Le Corbusier was immersed in this Algiers project. In the latest-dated letter in this batch, Le Corbusier expressively laments the non-fruition of his effort and dedication despite the repeated modification he had proposed of his plans over a period of several years. He must have sworn to himself then that he was not going to see his plans buried alive. He had to give them a chance.

Chandigarh gave him and his plans a chance. Foreseen in the Chandigarh project was the construction of a giant administrative complex to house more than 3,000 officials and office workers, an edifice 254 meters long and 42 meters high. Seven departments were to be accommodated in it. 63 spans and 252 columns were to be erected. The finished product would be something like his vertical Algiers building laid sideways.

Here, too, Le Corbusier's Modulor came in handy in finalizing basic dimensions. If that had been all, however, it would only have helped create agreeable proportions for column arrangement and floor elevations, the figure 254 meters providing the frame within which to monotonously repeat the same pattern. But in reality, the Modulor consisted of the blue row and the red row, in a 2:1 relationship to each other. This provided the possibility of eliminating monotony and enhancing size sense while saving gigantcity.

Of course, when he was still working on his Algiers project, he had not yet invented his Modulor, but he was already making methodical use of such proportions as 1:2 and 1:3 throughout his projects. The rupture of rigid regularity secured by these proportions gives birth to a sense of ease of access and creates an antipodal world to the super-highrise expressionless match-box buildings of only commercial merit which are beginning to clutter Japanese cities today.

般的超高層大樓而言，這更是一種完全相反的境界。

屋頂自然是平的，柯比意最常使用的屋頂花園在這裡一如在馬賽公寓裡所見到的，強烈的表達出光影的效果。

他喜歡在房子的中央軸上使用連接樓地板和樓地板的升降坡道系統，但在香地葛他却把這個構想反過來用，把坡道系統拉出來，放在一座塔裡面。斜坡很早就被廣泛的使用了，大概是從布宜諾斯艾利斯的醫生住宅就開始了吧！

我們可以發現這棟中央行政部會大廈的設計絕不是突然就產生的，而是許多他經過長時間精心思考設計的基本建築語彙的一種「再循環」。許多概念如果他在心中很重視，並加以更進一步的思考，經常會使這些概念最後都變得各具特色而互相爭勝。柯比意是一個喜歡長時間執着於同一個主題的人，有一次他在巴黎大學校園內瑞士會館（瑞士學生之宿舍）的牆上畫了一個獨角獸狀女神的想像畫，同樣的概念在更早以前的速寫裡可以找到，而 20 年後，他仍然在他進出香地葛時隨身攜帶的速寫簿上畫了相似的圖畫。

如同一些人長時間致力於小說創作，或對創新永恆的追求，我對柯比意這種相同的一貫態度有非常深刻的印象。這對我而言是一種無價的精神糧食。總而言之，我認為真正的價值只有透過長時間不斷的思考、回顧、更新、以及這些相同的步驟一而再的反覆再三才可能獲得。馬賽公寓的居住單元，從他開始有構想以來共花了他 30 年的時光才發展出來的。非常自然的道理，我們可以這麼相信，在阿爾及爾發芽的構想，在香地葛才結出了果實。

同樣的情形我們可以來談那“張開的手”，柯比意不喜歡握

Rooftops naturally tend to be flat. Le Corbusier's favorite assertion was to make gardens on rooftops, which, as we have seen in his dwelling units at Marseilles, create intriguing silhouettes.

He liked to use sloping floor-to-floor transfer systems as the central axes of buildings. At Chandigarh, he made reversed use of the idea, using the slope theme in tower form. Slopes were used quite extensively in his earlier works, too, starting with the residence of a doctor in Buenos Aires.

Thus seen, we can say that the central administrative complex in Chandigarh was not exactly designed ex abrupto, but was really a “recycling” of many of his vocabulary elements elaborated over a long period of time. Ideas he had been treasuring and refining in his head appeared to have finally been given an arena of blossoming en masse. Le Corbusier was a type of person who would adhere to the same motif for long, long years. He once drew the image of a one-horned beast-like goddess on the wall of the Pavillon Suisse (hostel for Swiss students) on the campus of the Cité Universitaire in Paris. The same idea is found in a much earlier sketch. Twenty years later, he was still drawing similar designs in the sketch-book he carried on his way to and from Chandigarh.

As someone in constant search for the novel and in perpetual pursuit of the unconventional, I was always impressed with his consistency, which provided me with priceless pabulum. I thought that, after all, an authentic value must be created only after many, many years spent in re-thinking, ruminating, refining and repeating the same process over and over again. It took him thirty long years to realize that Marseilles dwelling unit after he had begun to work on the idea. It was only too natural, then, that the ideas that sprouted in connection with the Algiers project were finally brought to fruition in Chandigarh.

The same can be said of the “Open Hand.” He saw in it room for a feeling he liked which was diametrically opposed to what the fist can tell. Of course, he was just enjoying the act of sketching, but in

緊的手，而經常畫張開的手。當然也只是喜歡畫畫它自娛罷了。但在1951年，他突然想要以喜馬拉雅山為背景而用混凝土為材料來建造它，而這和法瑪先生要求他早日完成這麼一個紀念物是同時間發生的。這個紀念物預備建在已經命名為「沉思之渠」的取土場，以使其能回復生機。再度的，模矩又派上了用場。所有的尺寸也已決定，但讓很多人感到遺憾的是，這座紀念物到現在仍未施工。

模矩在香港地葛計劃中扮演了重要的角色。在柯比意強烈的影響下，後來建在同一個城市的建築學院的學生們都親手參與了許多和模矩有關的工程計劃、集合住宅和辦公廳就是由這批年輕的建築師們建的。

但正如柯比意曾說過的，模矩只能算是調過音的樂器，想要產生有意義的結果則需要技巧高超的樂師才行。柯比意也並不經常是技巧高超的樂師，在一次粗心的誤彈自己的發明後，他頓悟到了這點。

事情是發生在他設計州長官邸的時候。事實上，在香港地葛柯比意所經手的建築物都是需要容納大量群眾的公共建築。他一向都使用藍色系列的尺寸作為空間分割的最佳依據，結果他很粗心的就把相同的尺寸誤用在州長官邸裡了。有人警告說，如果事情照這樣發展下去，預算的分配必然會不足的。要不是因為這個警告，他可能已經完成了一個比一般住宅大上兩倍的官邸了。由於在發展的同時政治和經濟上的困難，這棟官邸最後終是沒有蓋出來，也因為缺少了張開的手和州長官邸，這個首府在某種感覺上似乎就少了那麼一筆畫龍點睛之妙。

1951 he abruptly nurtured the desire to make a concrete object of it against the backdrop of the Himalayas. This coincided with the request he received from Mr. Varma for the prompt realization of such a monument. This was just what was needed to give life back to the hollowed soil-collection site, which had been named "Ditch of Thoughtfulness." Once again, the Modulor was called on to offer its services. All dimensions were finalized. But, to the regret of many, this monument yet remains to be erected.

The Modulor had played the central role in the making of Chandigarh. Under the strong influence of Le Corbusier, the students of the Faculty of Architecture, which was created in the same city later, took part in a number of construction projects with the Modulor in hand. Housing complexes and offices were built in the city by these young architects.

But the Modulor, as its inventor himself once remarked, is only something like a tuned musical instrument. If it is to produce a meaningful effect, it takes a skilled artist. He himself was not always the skilled artist it took, it seems, and on one occasion he came to a rude awakening after having inadvertently misused the device of his own invention.

This occurred when he was designing the Governor's Palace. Virtually all the buildings he had laid his hand on at Chandigarh were public places to accommodate large crowds of people, and he had consistently used the blue-row dimensions for optimum space partitioning. He unthinkingly used the same scale of dimensions in designing the Governor's Palace. Someone put in the word that the way things were developing, it was certain that the given budgetary allocation would prove insufficient. Had it not been for this warning, he would have completed a palace two times the size of the originally planned edifice! This palace, however, has not seen the light of day to this day, due to the political and economic difficulties that developed in the meanwhile. Without the Open Hand and the Governor's Palace, the Capitol, in a sense, appears to

另一棟未能加以仔細研究的重要建築物是議會。當這個案子正在事務所進行設計時，我離開了事務所，所以我沒法太談自己的體驗。不過有一件事，仍讓我印象非常深刻，就是他早期草圖裡的巨大落水口。他想像對當地雨季頻繁的雨水，這應該是很適當的。事實上，我們想想他是很對的，這落水口也是他自法院大廈和廊香教堂以來至今最喜愛的主題之一。

想得到允許進入議會也在在不易，經過多次的努力，我一直到前年才得到許可，可以被帶進去視察一番。在他主要的旋轉門上是如同他繪在廊香教堂的圖畫。當門全開時近處水池橫陳，而遠處喜馬拉雅山則悠然可見。

不過，如冷却塔般的會議廳和四周圍繞的柱列之間所形成的三角形跨間卻讓我覺得有未完成之感。我承認，或許由於印籍嚮導不斷的催促，而使得我對這棟建築並沒有深刻的印象。這可能是由於其他建築物都是經過長年的蘊釀才成熟，而大會堂和他們比起來就較欠缺琢磨。

柯比意也留下了許多平面非常單純、明快的住宅，我將等待機會一觀丰采。

lack the soul.

One other important building that cannot be overlooked is the Palace of Assembly. When the project for this building got under way, I was no longer with him, and I cannot say much in the way of first-person reporting. One thing I do remember with singular vividness is the huge gutters in his earlier sketches which he thought would be appropriate in view of the heavy monsoon rain. It is true, come to think of it, that the gutter was one of his favorite themes which he pursued in the Court-House project and the Chapel of Ronchamp.

It is not easy to obtain permission to enter this palace. After much effort, I finally was allowed to be ushered in for inspection the year before last. On its rotating main door was a rather Ronchamp-like image in enameled drawing. When it was fully open, a gradiose scene with a pond in the foreground and the Himalayas in the background unfolded.

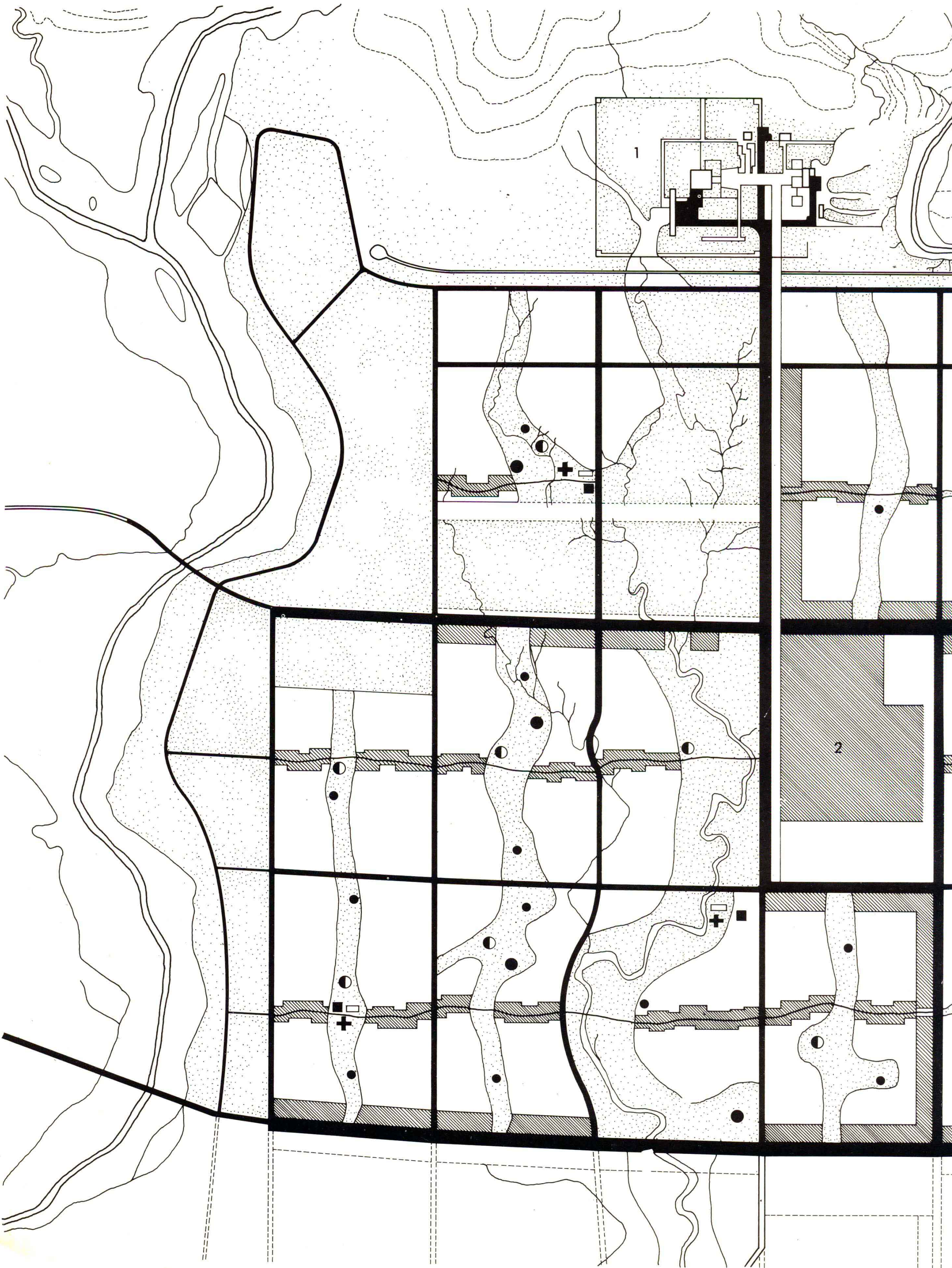
But I felt the presence of a touch of unaccomplishedness in the Assembly Hall and the row of columns around it featuring triangular spans. I must admit that, perhaps because the Indian guide kept hurrying me, I was somehow not very deeply impressed. It may be that, unlike other buildings which were, so to speak, the fruit of years of refinement, the Palace of Assembly was of relatively recent origin in his scale of aging of ideas.

Le Corbusier has also left a number of houses characterized by drastic simplification and resulting lucidity in plan. I shall await another opportunity to shed light on them.

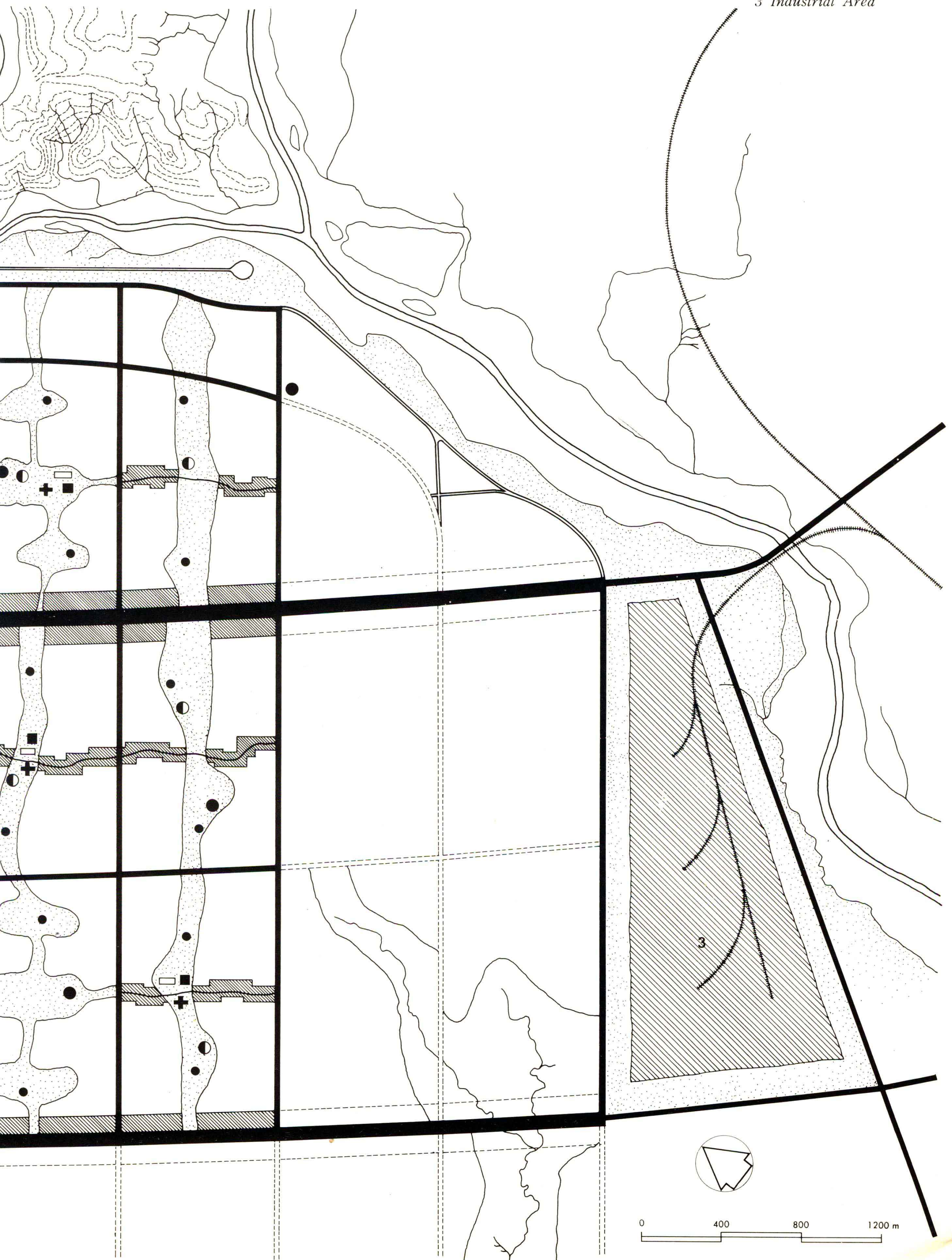
(Translation from Japanese original by Terutoyo Taneda)

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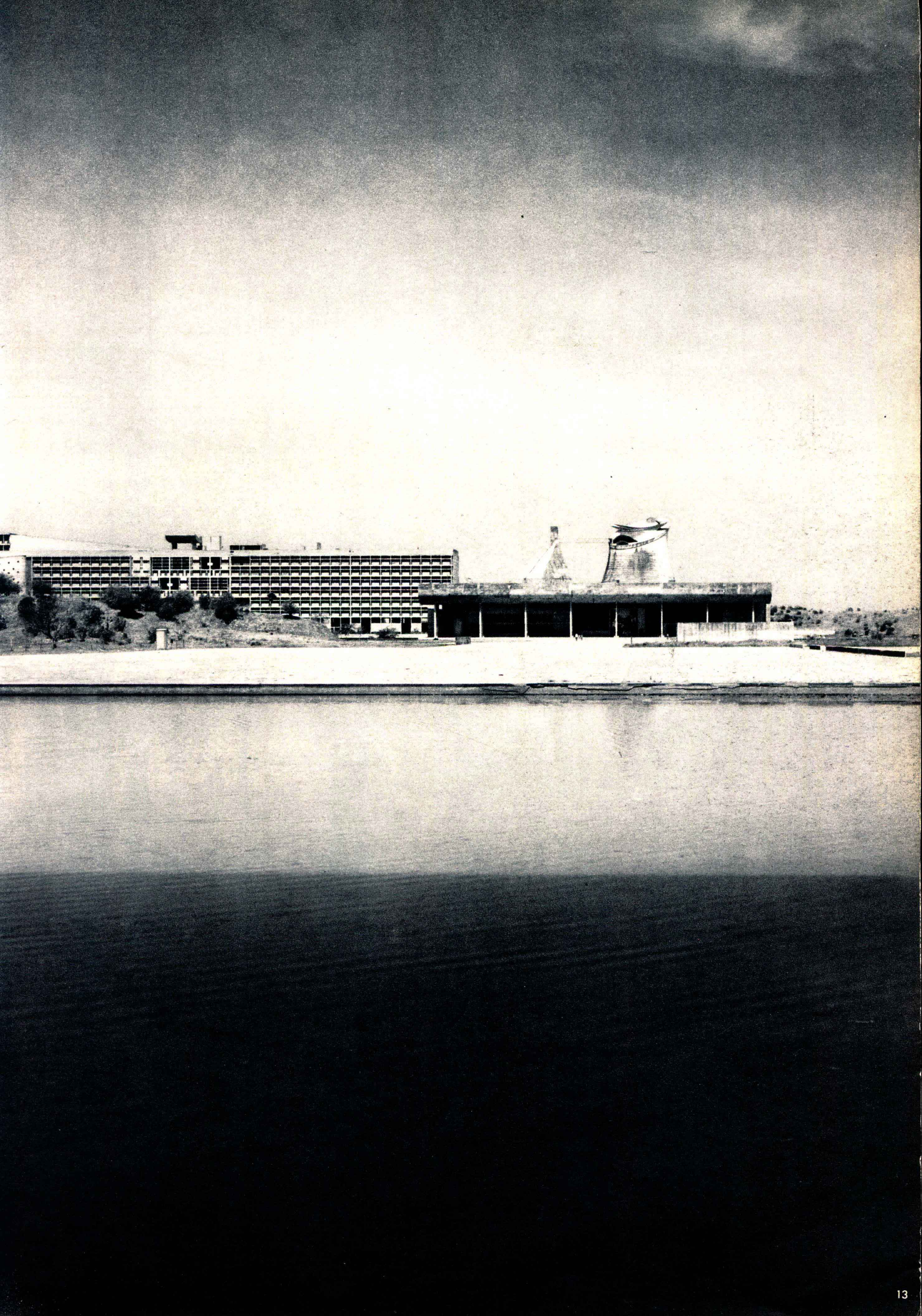


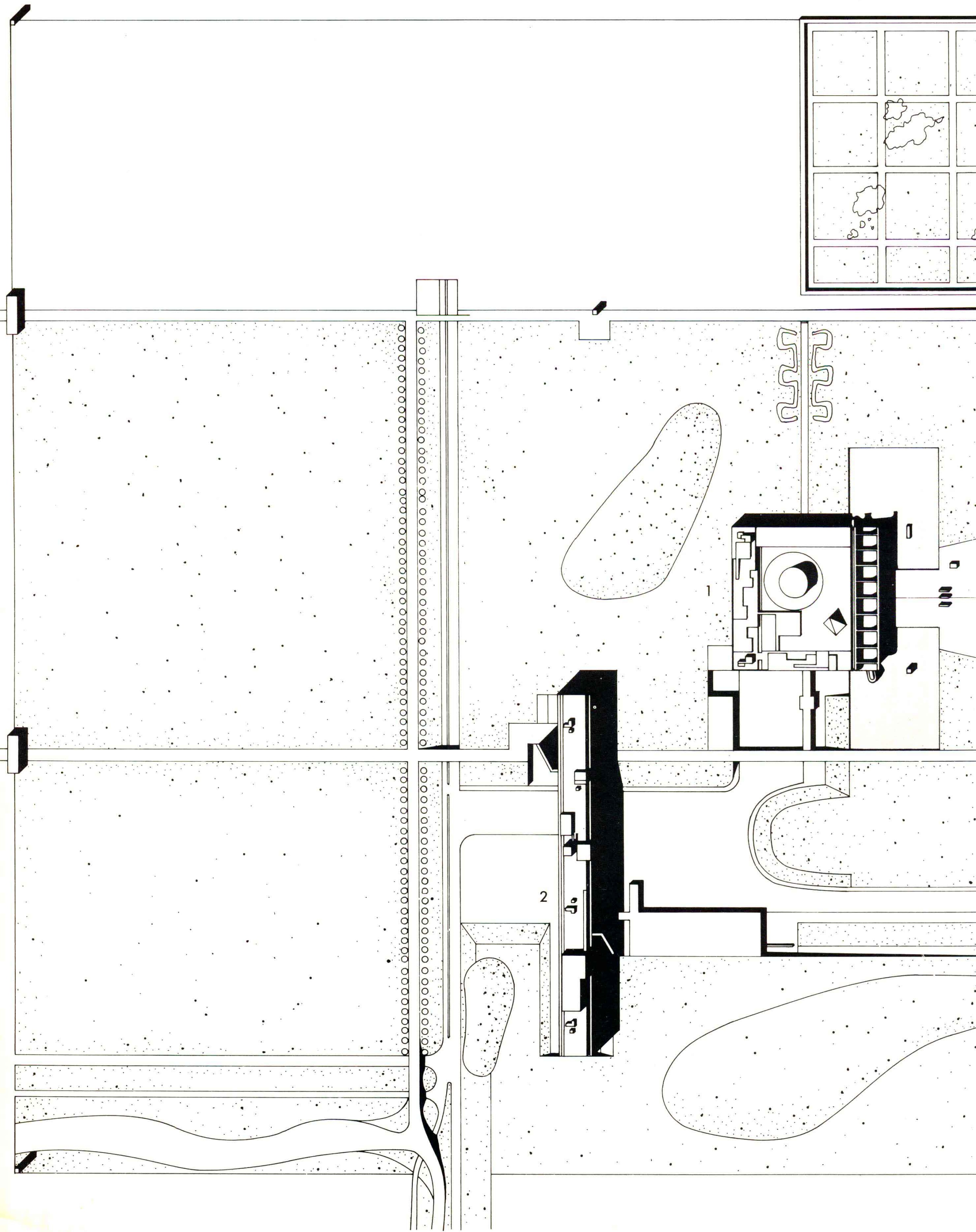


- 1 Capitol
2 Main Commercial Center
3 Industrial Area









- Site Plan*
 1 *The Palace of Assembly*
 2 *The Secretariat*
 3 *The Palace of Justice*
 4 *Governors Palace*
 5 *Monument of the Open Hand*

