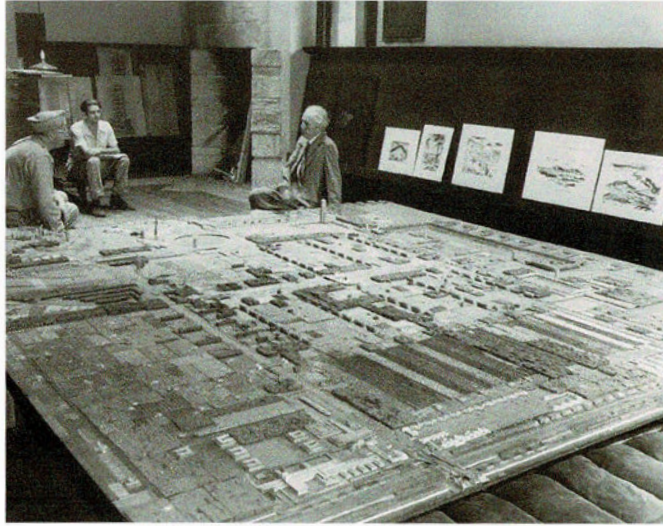


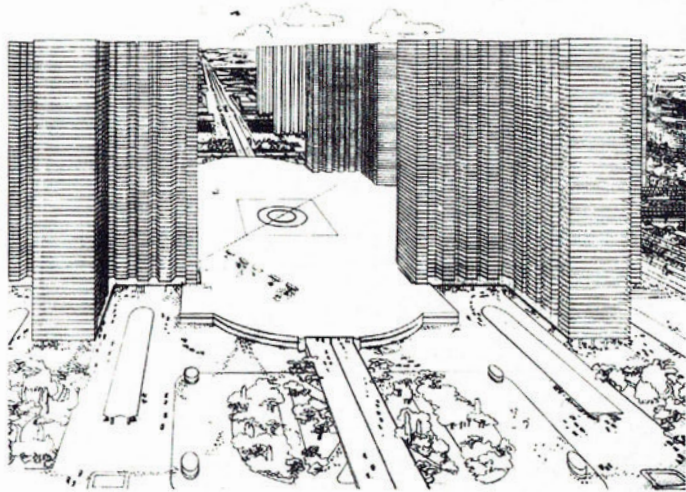
## 4.5 CIAM's solution to the problems of the city

By contrast, Le Corbusier's vision seems positively urban, although it involved entirely re-casting the idea of a city. His utopian 1922 project for a City for Three Million laid out an idealized Cartesian grid with office towers in the centre around which were housing apartment blocks, and, well separated from the city itself, an industrial quarter (**Figure 4.8**). Le Corbusier believed that earlier cities would necessarily have to adapt in order to survive economically, and this would involve their wholesale redevelopment. It was foolish romanticism to believe otherwise. In the hands of a talented architect, the necessary ruthlessness could approach

**Figure 4.7** Photograph of Wright and two assistants with a model of Broadacre City

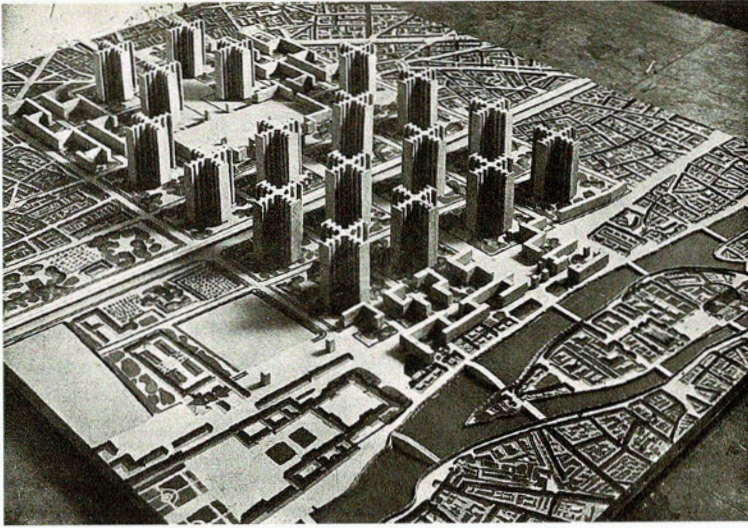


**Figure 4.8** Le Corbusier: City for Three Million, 1922, aerial perspective of central towers with airport



the sublime, as illustrated in his 1925 Voisin Plan for Paris (**Figure 4.9**). First, here is his criticism of the existing context:

The definition of the street which has held good up to the present day is “a roadway that is usually bordered by pavements, narrow or wide as the case may be”. Rising straight up from it are walls of houses, which when seen against the sky-line present a grotesquely jagged silhouette of gables, attics, and zinc chimneys. At the very bottom of this scenic railway lies the street, plunged in eternal twilight. The sky is a remote hope far, far above it. The street is no more than a trench, a deep cleft, a narrow passage. And although we have been accustomed to it for more than a thousand years, our hearts are always oppressed by the constriction of its enclosing walls.



**Figure 4.9** Model of central Paris with Le Corbusier's Plan Voisin proposal superimposed

In his vision of the new city, the office buildings would be entirely of glass.

A sheet of glass and three partition-walls make an ideal office: this type of construction holds good when a thousand have to be provided. So from top to bottom the façades of the new city's office-buildings form unbroken expanses of glass. These colossal structures evince no vestige of masonry. All that remains visible is glass . . . and proportion. The architect has discarded brick and stone.

And he concludes:

What you have just been shown was the city's 'City', its feverishly active business centre. The idea of realizing it in the heart of Paris is no Utopian flight of fancy. There are cold figures to substantiate this thesis. The enormous increase of land-values that must result would yield a profit to the state running into milliards of francs – for to acquire the central part of Paris and redevelop it in accordance with a coordinated plan means the creation of an immense fresh source of wealth.

Then the street as we know it will cease to exist. And the old makeshift expedient of canyon-like cross-roads would no longer be tolerated in residential and dormitory districts.<sup>24</sup>

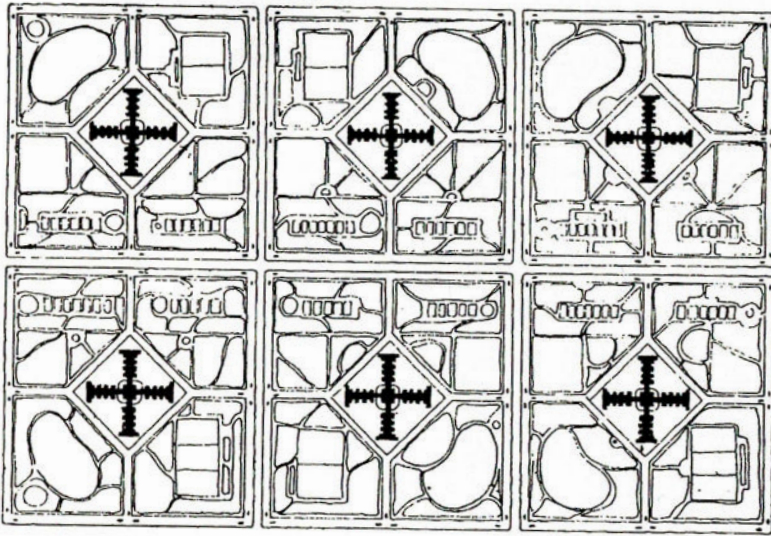
When Le Corbusier described the idea of a "city of towers" in his 1923 *Vers une Architecture* (Figure 4.10), it's instructive that in the caption to an illustration of the sixty-storey cruciform buildings he appears to change his mind about their function:

A project for Apartments or Flats . . . It is evident such buildings would necessarily be exclusively devoted to business . . . Family life would hardly be at home in them. The figures are terrifying, pitiless but magnificent.<sup>25</sup>

24 Le Corbusier and Jeanneret 1964, pp. 118–119. For a fuller treatment, see Le Corbusier 1987.

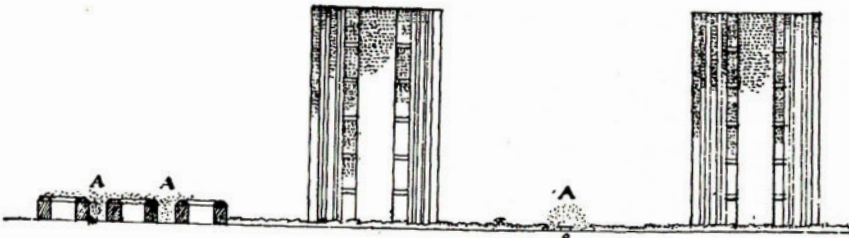
25 Le Corbusier 1946.





LE CORBUSIER, 1920. A CITY OF TOWERS

*A project for Apartments or Flats, built as towers of 60 storeys and rising to a height of 700 feet; the distance between the towers would be from 250 to 300 yards. The towers would be from 500 to 600 feet through their greatest breadth. In spite of the great area devoted to the surrounding parks, the density of a normal town of to-day is multiplied many times over. It is evident that such buildings would necessarily be devoted exclusively to business offices and that their proper place would therefore be in the centre of great cities, with a view to eliminating the appalling congestion of the main arteries. Family life would hardly be at home in them, with their prodigious mechanism of lifts. The figures are terrifying, pitiless but magnificent: giving each employee a superficial area of 10 sq. yds., a skyscraper 650 feet in breadth would house 40,000 people.*



A CITY OF TOWERS

*This section shows on the left how dust, smells, and noise stifle our towns of to-day. The towers, on the other hand, are far removed from all this and set in clean air amidst trees and grass. Indeed the whole town is "verdure clad."*

Figure 4.10 A page from the English edition of Le Corbusier, *Vers une Architecture*, 1923

Le Corbusier believed architects could meet the “terrifying” architectural challenge offered by the problem of the twentieth-century city and that the result itself could be magnificent, while at the same time admitting that high-rise buildings are not a suitable form for housing families: they would be accommodated in *maisons à redents* – four-storey maisonette blocks “with set-backs”. It is therefore unfair to blame Le Corbusier personally (unlike Gropius) for the ubiquitous high-rise housing tower blocks and slabs of the later twentieth century that were designed to accommodate families, even though the accusation is understandable in view of his contradictory polemic. It was not until his later post-war *Unité d’habitation* blocks that he was able to find a form that embedded mixed uses in a high-rise building allowing family housing to be provided above four storeys: the blocks were conceived to be more like ocean liners, with all facilities on board.<sup>26</sup> More problematic is his ready acceptance that architects should treat mass housing, and whole cities, as an aspect of the aesthetic sublime.

Some have argued that Le Corbusier’s urban theories were not prescriptions but predictions: this is how cities were going to be in any case, and architects needed to get a handle on how to compose them or the results would be catastrophic. They claim the subsequent phenomenon of urbanization all over the world, most visible first in Japan and then China, justifies that argument. Others would say that it was partly because architects, along with everyone else, were prepared to accept the brute realities – relishing them rather than furnishing an alternative vision of some kind – that we find ourselves in such a position.<sup>27</sup>

In 1933 members of CIAM, the *Congrès Internationaux d’Architecture Moderne*, met on the steamship *Patras II* in Marseilles, and sailed to Athens and back. CIAM was a self-appointed avant-garde of progressive European architects, and this was their fourth meeting. They discussed the idea of the city, and the results of their deliberations were enshrined in a manifesto, the *Charter of Athens*, published ten years later.<sup>28</sup> Le Corbusier was both the dominant influence on board and edited the subsequent publication, which reflected their prescriptions in 95 categorical pronouncements. Number 27 forbade the creation of streets by buildings that would form a line along them; Number 29 advocated high-rise buildings. Number 77 contained an extraordinarily reductive definition of the city as consisting of only three functions – habitation, work and recreation – which would be joined together by circulation, and Number 78 was positively dictatorial in stressing their autonomy. These prescriptions could hardly be called merely predictions.

The influence of CIAM’s thinking was considerable and nowhere more than in road engineering. As volumes of traffic increased, techniques were developed to measure anticipated passenger car units quite precisely and plan out the implications of catering for them. The transportation engineer Colin Buchanan’s 1963 *Traffic in Towns* showed the consequences of absorbing the motorcar into towns and cities in the United Kingdom (Figure 4.11).<sup>29</sup> Kenneth Browne, an artist who worked on *The Architectural Review*, provided the graphic images, illustrating

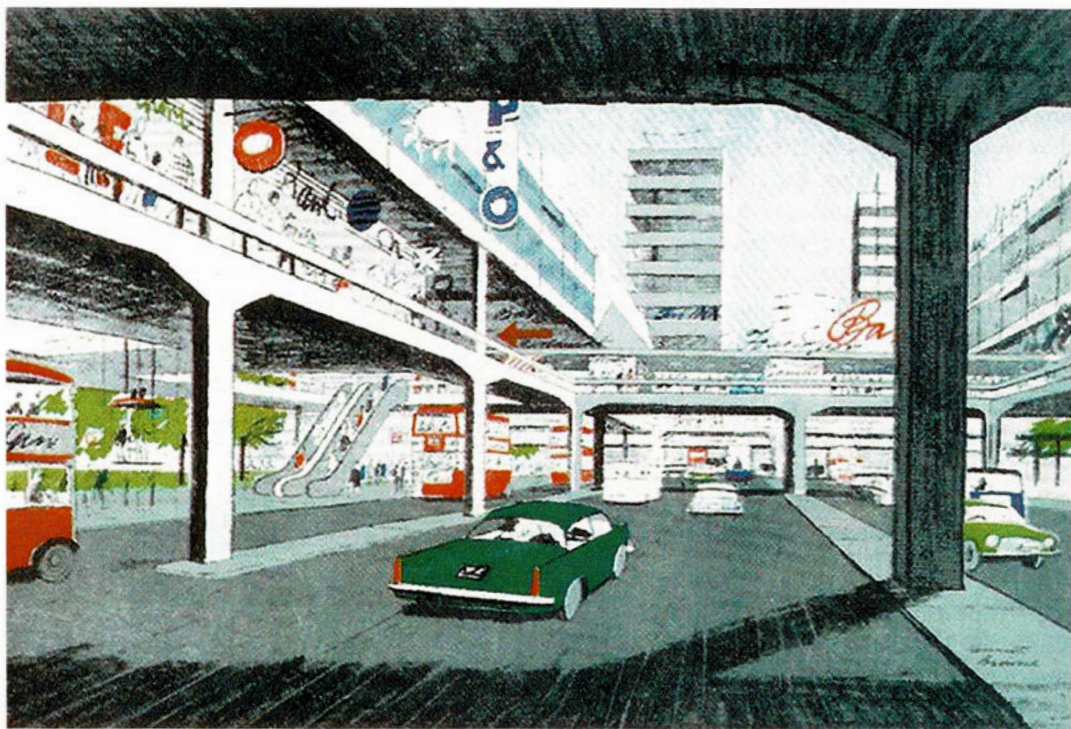
26 The *Unité* blocks are about six times larger than their most famous British imitations, the slabs at Roehampton West. The first and most famous *Unité*, in Marseilles, is now predominantly occupied by architectural aficionados. It is unfortunately the case that many of Le Corbusier’s surviving buildings have become museums of some kind or another to be enjoyed by a select minority who have learnt to appreciate their aesthetic quality.

27 See for instance the many writings of Lewis Mumford (1895–1990), notably Mumford 1961.

28 Le Corbusier 1973.

29 Buchanan 1961.





**Figure 4.11** Illustration by Kenneth Browne from *Traffic in Towns*, 1963

how pedestrians would be confined to decks and vehicular roads given priority. Buchanan offered a choice: you did not *have* to cater for motor cars. But people were clearly going to. All over Europe similar projects were promoted, although many of them only proceeded a certain way, as the truncated upper-level walkways around the Barbican in the City of London indicate.

## 6.4 Rochester Unitarian Church

The five projects for the Unitarian Church at Rochester (1959–1967) indicate Kahn's compositional technique (**Figure 6.10**). He distinguished between what he termed form and design. Form was the

**Figure 6.8 Louis Kahn: Richards Research Laboratory, Philadelphia, 1957–1960, view**



idea of the building: very often in Kahn's compositions this would be expressed as a central room surrounded by subsidiary subservient rooms. The process of design was accommodating the architectural idea to cater for the circumstances of a particular brief, site and budget. As he explained:

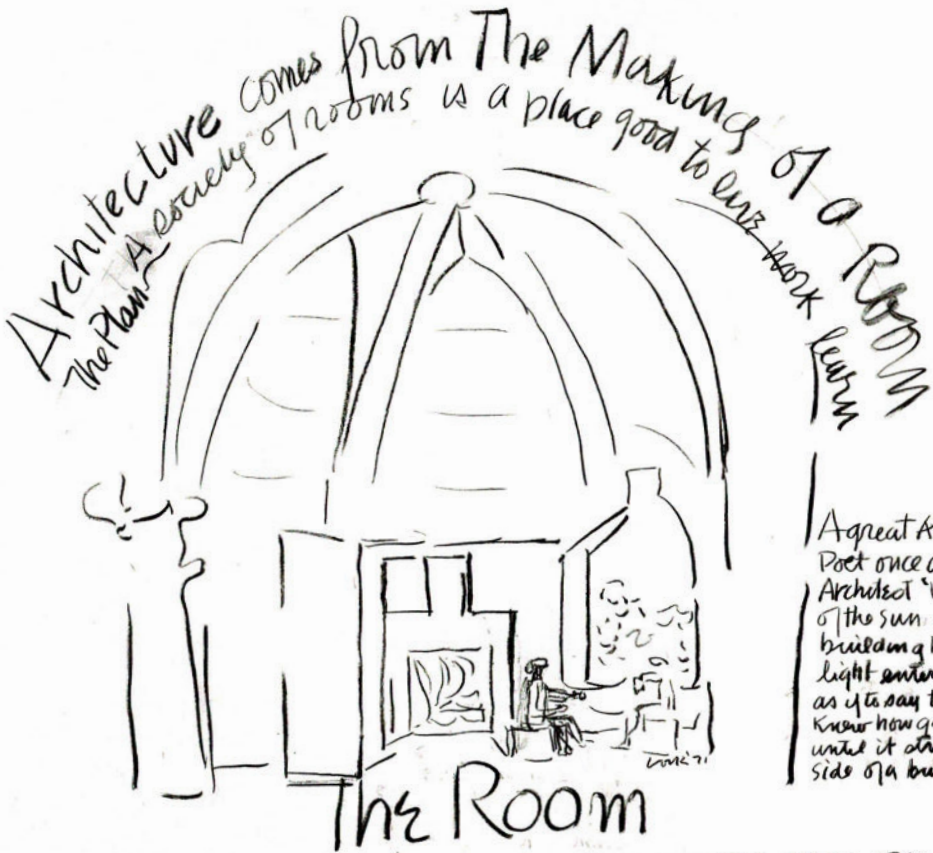
If I were to define Architecture in a word, I would say that architecture is the thoughtful making of spaces. It is not filling prescriptions as clients want them filled. It is not fitting uses into dimensional areas . . . it is a creating of spaces that evoke a feeling of use.<sup>12</sup>

The first iteration had subsidiary spaces surrounding a truncated polyhedron (surely derived from his interest in Buckminster Fuller), with a circular ambulatory; in a second version the central church was rectangular, and so it remained in the third version. In the fourth version, the worship space was square with roof lighting at the four corners, and that remains the pattern as constructed but with a thickened service wall between the main space and the ambulatory. The incidental pattern of the architecture might have varied, but the ideal form held. The form itself derives from a meditation on the nature of the institution – in this case a church. Kahn used the idea of a school to explain his process:

I am trying to find new expressions of old institutions. The institutions of learning, let us say, with which we are so concerned today,

<sup>12</sup> Kahn 1991, p. 116. The second sentence of this quotation is often printed "It is not filling prescriptions . . .", which is clearly an error.





is The place of the mind. In a small room one does not say what one would in a large room. In a room with only one other person could be generalists. The vectors of each meet. A room is not a room without natural light. natural light gives the time of day and the mood of the space to enter.

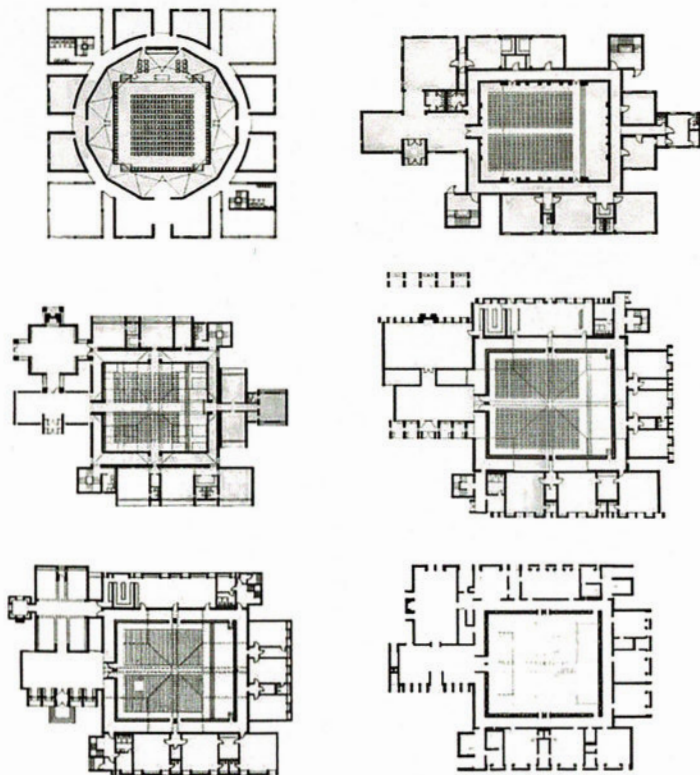
probably began with a man under a tree and around him the listeners to the words of his mind. The marvel of the first classroom never leaves me, and now I approach a problem with the desire for the sense of beginnings. I think we need in all schools reverence for the marvels of beginnings.<sup>13</sup>

**Figure 6.9** Kahn's idea of the room

Kahn was concerned, in other words, to celebrate what he called the institutions of man, and in philosophical terms his distinction between ideal form and circumstantial design reveals his idealism: each particular example is the reflection of a higher ideal. The compositional technique forsakes the Bauhaus orthodoxy of an exhaustive analysis of functions followed by the choice of freely-expressed forms to revert to something much closer to that of the Beaux-Arts described in Chapter 2 (pp. 38–39): an *esquisse* that encapsulates the idea of the project, by the

13 Kahn 1991, p. 229.

**Figure 6.10** Louis Kahn: Rochester Unitarian Church, 1959–67, initial design and five iterations



choice of a formal *parti*, which is modified and refined in subsequent design work while retaining the conceptual idea.