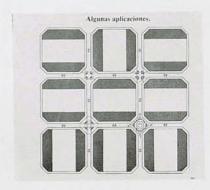
ILDEFONS CERDÀ AND THE MODERN BARCELONA

CERDÀ'S PLAN FOR THE CITY OF BARCELONA CONSISTED IN THE REPETITION AD INFINITUM OF A BASIC BLOCK, WHICH WAS PERFECTLY SQUARE, 113.33 METRES ALONG EACH SIDE, WITH 45° CORNERS. THIS GAVE BARCELONA THE IDEAL CITY-IMAGE, BASED ON UNIFORM BLOCKS, CONNECTING STREETS AND INTERSECTIONS FORMING A PATTERN OF OPEN SQUARES REPEATED IN SERIES.

JOSEP MARIA MONTANER ARCHITECT

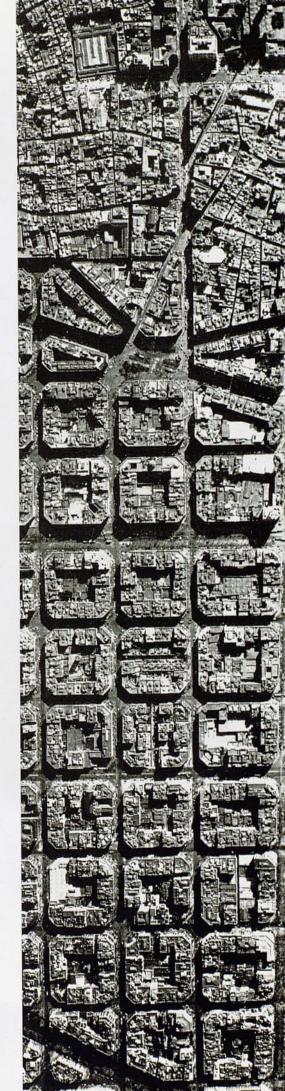


efore the Pla Cerdà was put into practice from 1859 onwards, Barcelona was a city with a typical medieval structure which was beginning to change because of industrialization and growth. New public buildings, like the Liceu theatre, had to be fitted in to a saturated network; the large number of residential buildings were situated in the few free spaces of the walled city; the textile factories were installed in the old city -the areas of Raval and Sant Pere- and outside in areas like Poble Sec or Poblenou; there were also pockets of working-class houses in the most run-down outlying areas, very often next to the factories themselves. To allow all this growth, major work had been undertaken during the end of the eighteenth century and the first half of the nineteenth; projects such as the opening up of new streets -for example, the Ferran-Jaume I-Princesa axis-, new squares such as the Plaça Reial, and

there had even been some interior replanning of streets and blocks as in the grounds of the old *Palau Menor* or around streets like *Pintor Fortuny*. The laws abolishing unlimited tenure, passed by more progressive governments, played an important part in many of these interventions.

With the *Pla Cerdà* all this diversity and disorder was included in a single coherent plan. The idea was for a new, homogeneous layout which would allow the city to carry on expanding for decades, taking on a new, totally different structure from the old one and arranging all the spaces and buildings of the modern city in a common rational urban plan, including public and private buildings, streets, parks and leisure areas.

Ildefons Cerdà was born in 1815 in Centelles (Barcelona) and died in 1876 in Caldas de Besaya (Santander). Having originally studied humanities in





Vic, he went on to study mathematics and architecture in Barcelona, and then went to Madrid in 1835 where he became a public engineer in 1841. The predominance of military engineers in public works during the eighteenth century gave way to that of the civil engineers in the nineteenth. Cerdà returned to Barcelona for long periods and studied the city's urban and social condition from a scientific point of view. The result of this work was his 'Topographic Plan of Barcelona and surrounding areas' in 1850 and the 'Statistical Monograph of the working class in Barcelona' in 1856. Cerdà shared the most advanced opinions of his time and on several occasions during the more progressive periods held political posts. His ideas on town-planning and society were heavily influenced by the work of the Utopian Socialists, the Internationalists and the Hygienists. From his innovatory vision, both in the social and technological aspects, came his plan for Barcelona, whose main characteristics were the defense of egalitarianism, opposition to private ownership of land, the wish to make use of the advantages of nature, health considerations and faith in the new technical advances. As a synthesis of all his ideas and experience in the field of town-planning, Cerdà wrote the Teoria general de la urbanización in 1867, at that time the most advanced text in Europe on the subject.

The decision to use Cerdà's plan was taken within the context of the long struggle –dating from the eighteenth century– between the central power and the city-halls. Although the latter had gradually recovered their power, the government wanted to maintain the initiative in some crucial matters. For this reason, the plan by the engineer Cerdà was imposed in preference to the plan by the architect Rovira i Trías, defended by the city council. In this case, history has shown the decision to be right. Cerdà's project did not so much extend Barcelona as give it a new over-

all form. Being imposed by the central government, the inhabitants of Barcelona viewed the *Pla Cerdà* with distaste, practically until the time of its defence by the rationalist architects.

The outstanding characteristics of the plan Cerdà proposed for the city are its optimism and the unlimited possibility of expansion, its uniformity and the deliberate absence of a privileged centre; its mathematical nature, strictly geometric and scientific; the key role of the urban parks and the gardens in the interiors of the blocks, providing for a healthy city, although subsequent property speculation has managed to make it almost as crowded as the old one; the importance given to technical advances, especially in transport, foreseeing the inclusion of extensive railway lines in the proposed streets; and the concern for the provision of special blocks of public buildings in each district.

The formal essence of the proposal consisted of a basic block, which could be repeated ad infinitum. Its shape is crucial to the overall plan and unique compared to other European cities: a perfectly square block, 113.33 metres along each side, with 45° corners, also unique. This gave Barcelona the ideal cityimage, based on uniform blocks, connecting streets and crossroads forming a pattern of open squares repeated in series. These formal qualities of the block-unit designed by Cerdà have been the basis of all the characteristics of modern Barcelona: its morphological flexibility allows variety and the inclusion of rows of residential buildings and individual public buildings; its unitary, continous aspect against which the originality of the Modernist buildings marks a counterpoint; the capacity with which the network of streets has absorbed the increase in traffic over more than a century. These are some of the characteristics of an urban plan that totally and decisively defined the shape of Barcelona today, modernizing it without palliatives.