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BARCELONA: PLANNING AND CHANGE 1854-1977

by

MARTIN WYNN

For some considerable time now there has been a relative dearth of information in English about urban planning in Spain. Studies by economists and geographers have largely concentrated on the national and regional economic aspects of planning, focusing above all on regional differences and country-city migration, but urban planning has received little attention. This paper aims to help redress the balance by examining the evolution of urban planning in Barcelona since the middle of the nineteenth century.

During the period under review there has indeed been a great deal of planning activity in Barcelona. The early plans of *ordenacion* (arrangement, physical ordering) such as that of Ildefonso Cerda, which remained the official Development Plan for the city for almost a century, were concerned largely with the development of all or part of the plain of Barcelona, stretching from the old city on the coast to the Tibidabo mountain inland (see Fig. 1). In the last 25 years, however, a series of more sophisticated plans have appeared as the scale and complexity of urban growth have increased. The first two sections of this article outline the major features of planning and growth in the two periods 1854 -1952 and 1953-1977; the final section attempts to assess the value of some of the historical perspectives relating to planning over the period as a whole, which have appeared in Spanish commentaries in recent years.

EXPANSION ACROSS THE PLAIN 1854-1952

'Like Goethe in his agony, Barcelona asked for more light . . . It had the sun and air within reach; from the height of its glorious but military walls, the Barcelonans contemplated the plain that stretched, like a fantastic Mesopotamia from the Llobregat to the Besos, protected by an undulating mountainous ridge'. (*De la Puerta del Angel a la Plaza de Lesseps* by A. del Castillo, *Libreria Delmau*, 1945).

'Barcelona lost the opportunity of becoming a city that, even today, would be one of the most modern and, what is more, one of the most beautiful in Europe'. (*Ildefonso Cerda, su Ensanche y la Satira de Ambos* by J. M. Garrut, *San Jorge*, No 51, July 1963).

ANTECEDENTS: PLANNING IN THE MEDIAEVAL CITY

Barcelona's mediaeval walls were built in the thirteenth and fourteenth centuries and the physical form of the city remained largely unchanged until the beginning of the eighteenth century. In 1717, under the repressive reign of the early Bourbons, over 1350 houses were demolished to make way for the construction of the citadel (shown to the right of the old city in Fig.1). Those left homeless encamped on the spit overlooking the port and it was here that the military authorities built Barceloneta (little Barcelona), the first extra-mural expansion, in 1753 (see Fig.1).

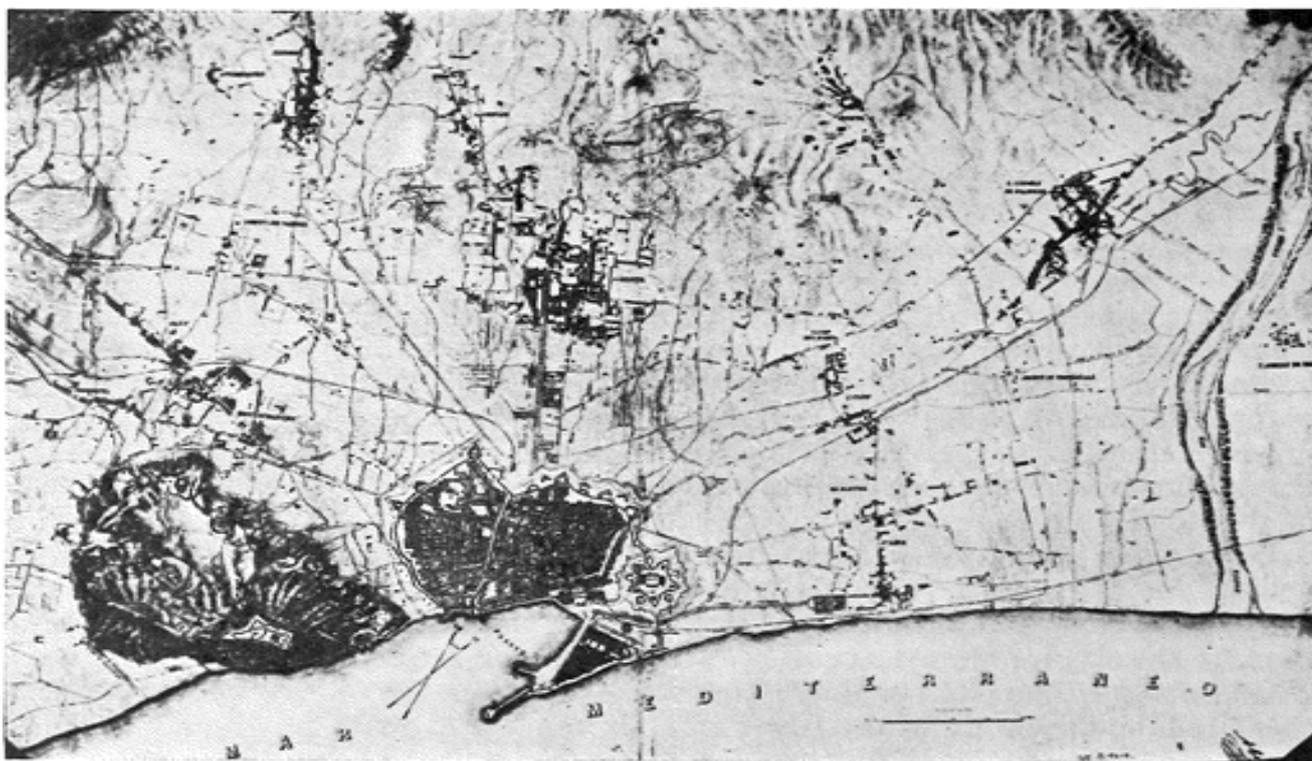


Fig. 1 Cerda's Topographical Plan of Barcelona, 1855, showing the Citadel and Barceloneta to the right of the Old City and the outlying settlements on the inland plan.

The foothills of the Tibidabo mountain run across the top of the plain (source: *Archivo Historico Municipal de Barcelona*).

During the second half of the eighteenth century, the Barcelona Council passed a series of regulations restricting the height and overhang of buildings and setting minimum room dimensions, which were by and large ineffective because of the corruption and inefficiency of the municipal

authorities themselves. Meanwhile, the military authorities, concerned about hygiene and safety, but also about security in a notably nationalist and rebellious part of Spain, opened, widened and straightened streets, particularly in the era of the Conde de Ricla (Military Governor from 1767 to 1772). In the last thirty years of the century, however, private initiatives began to play an increasingly important role in the development of the city and the plans of Camps (1771) and Bastero (1787) were attempts to establish a rational distribution of housing around newly installed cotton/calico factories as the city grew rapidly, outwards and upwards, within the confines of the mediaeval walls. These two plans, along with that for Barceloneta, constitute the forerunners to the plans of *Ensanche* (expansion beyond the mediaeval walls) of the mid-19th century.



Fig. 2 The Plan of *Ensanche* of Antonio Rovira y Trias, 1859

(source: *Archivo Historico Municipal de Barcelona*)

PLANNING AND DEVELOPMENT OF THE *ENSANCHE*

Infilling continued in the Old City in the early years of the nineteenth century, and with population densities of over 1500 inhabitants per hectare in some areas, several plans of *Ensanche* were proposed by military engineers and municipal architects. These involved only very limited extensions of the built-up area and only in 1854, when the central government consented to the destruction of the mediaeval walls, did expansion across the plain become a realistic possibility.

The plans of the 1850s of Garriga y Roca (1), of Rovira y Trias (Fig. 2) and above all, of Ildefonso Cerda (Fig. 3) mark the real step forward to the idea of *ordenacion* on a large scale. In the *Plan Cerda* the whole city was ordered, with all elements, housing, industry, markets, social centres etc. given their place, in an adaptation of an underlying idealised model to the geographical realities of the plain. Apart from introducing normative controls (e.g. building height and depth), the plan was also fully comprehensive in its global formalisation of the city. In this sense, it was different from anything that had gone before in the planning of the city and arguably puts Cerda and his urban theories in the forefront of the development of urban planning in the nineteenth century.

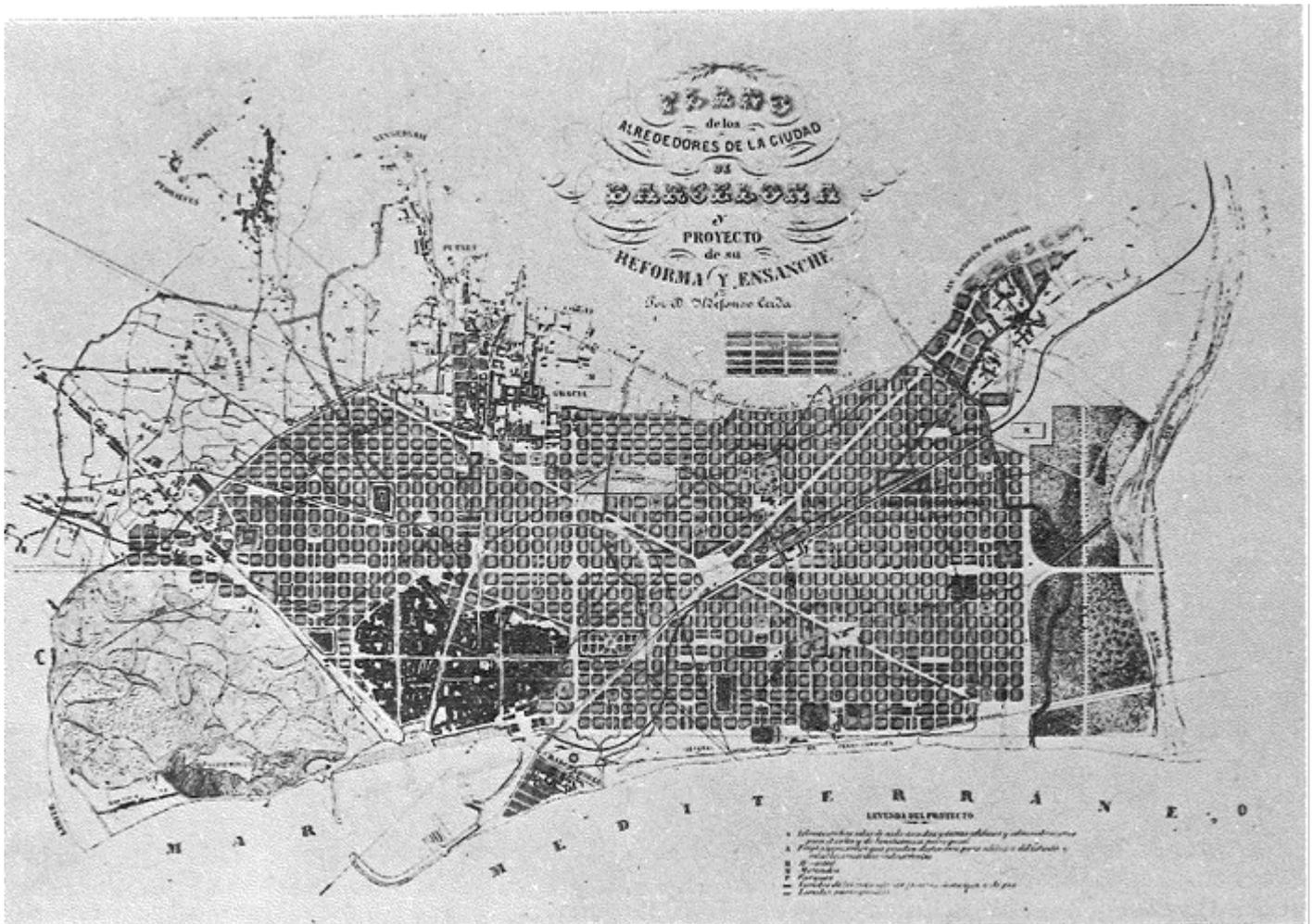


Fig. 3 The Plan Cerda, 1859
(source: Archivo Historico Municipal de Barcelona)

The Catalan middle classes developed the plain of Barcelona with scant regard for the dictates of the *Plan Cerda*. The *manzana* (block) was built up on all four sides (c.f. only on two in the plan-see Fig. 4) and within (Fig. 5). Parks and gardens were encroached upon or disappeared altogether; *manzanas* destined for schools, markets and social centres in the *Plan Cerda* were used for house

construction and commercial and industrial buildings. Instead of the egalitarian polycentricism foreseen by Cerda, middle class residences tended to be built around the central commercial axis (*Paseo de Gracia*), with the working classes resident in the dilapidated houses in the Old City and in the sub-equipped, poorly connected periphery in and around the old nuclei which included the main concentrations of industry, forming mixed residential/industrial zones.

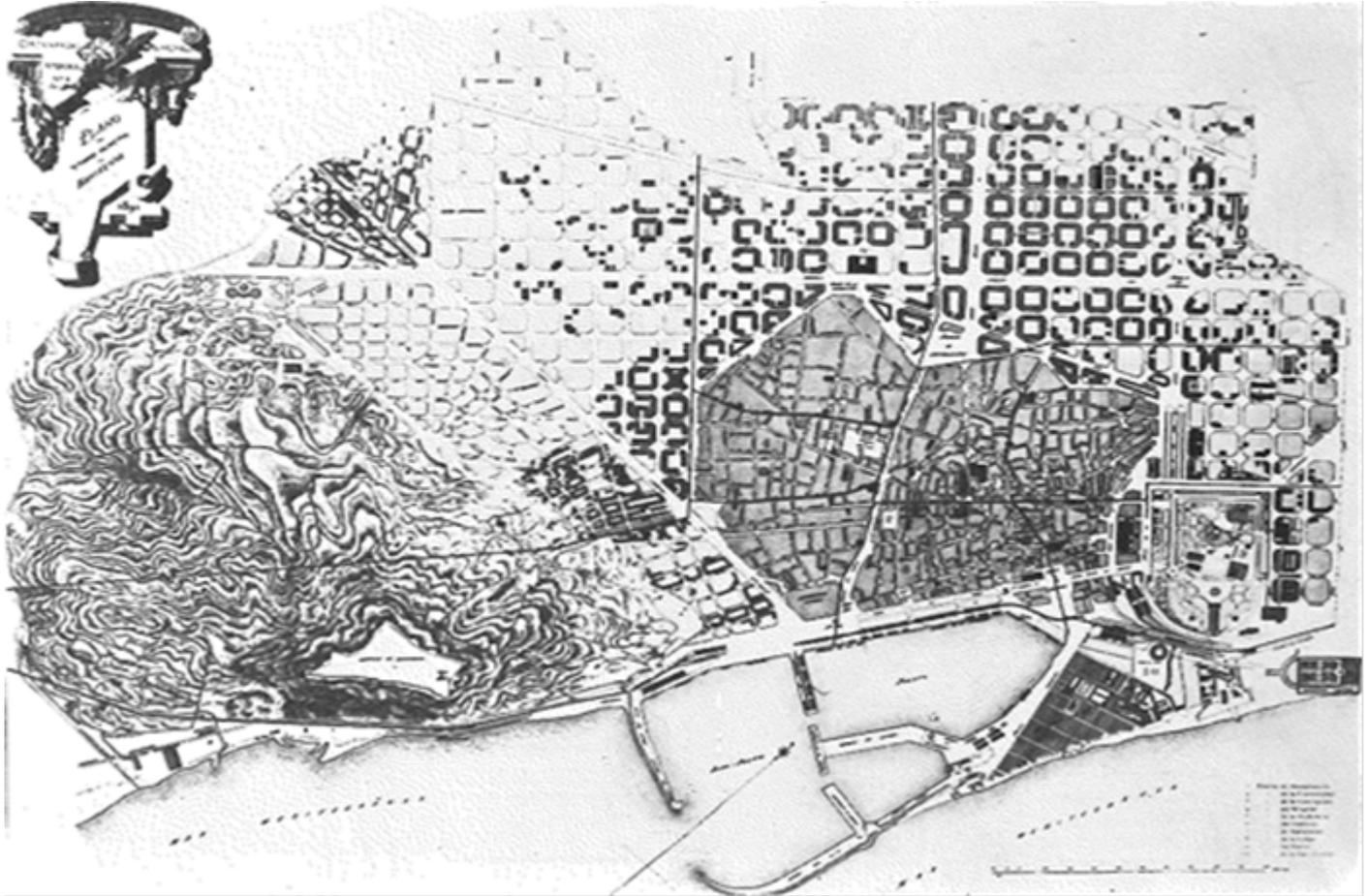


Fig. 4 The Municipality of Barcelona in 1891.

To the right, the Citadel has been demolished and a park created in its place: to the left, the Montjuich hill overlooks the Old City (source: *Archivo Historico Municipal de Barcelona*)

The city grew in radio centric form, in fits and starts, reflecting the economic and political climate of the time. The main bursts of growth were 1876-86 and 1914-29 when, apart from the increase of building densities in the central Ensanche, two new areas of the city were urbanised to pave the way for International Expositions on Montjuich and in the Citadel Park (see Fig. 4), where grandiose buildings, exemplifying the bourgeois concept of the city par excellence, were constructed (e.g. the *Arco de Triunfo*, *Palacio Nacional*). A functional and social segregation had been established and the globality of the Plan *Cerda* was lost for good.

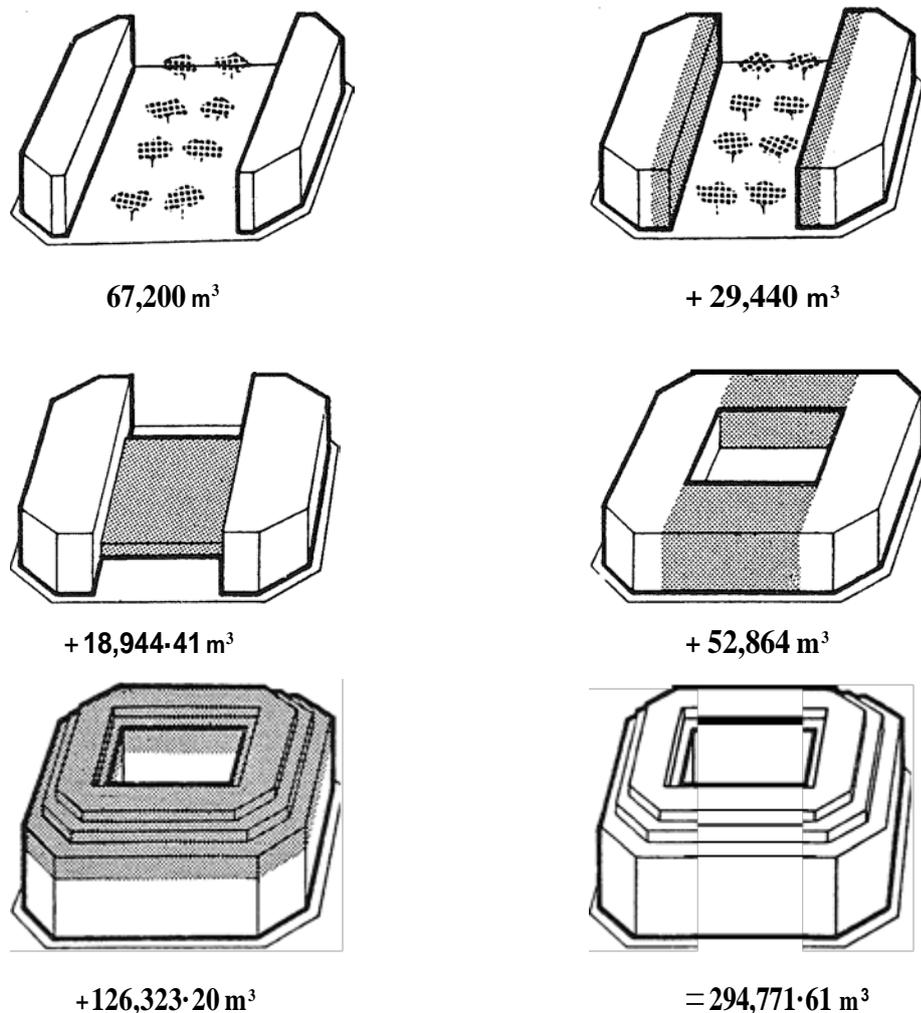


Fig. 5 The infilling of Cerda's *Manzana* (block).

The built-up space in the average manzana increased from 67,200 m³ in the Plan Cerda (top left) to almost 295,000m³ in 1972 (bottom right). (source: *Construccion de la Ciudad*, No.0, 1972).

IMPERIAL BARCELONA

Although the *Plan Cerda* remained the official Development Plan for Barcelona until 1953, several other urban plans were drawn up for the city, although they never received official approval from local or central authorities. After the turn of the century, the pro-Catalan activist element in local government became increasingly vociferous and the *Lliga Regionaliste*, its political arm, made important gains in the 1902 municipal elections. In 1903, an international competition was held to find a plan to link the *Ensanche* with the newly annexed suburbs. The winning plan (Fig. 6), by French architect Leon Jaussely, involved a radical remodelling of the *Ensanche* through the incorporation of monumental forms and scenic views into Cerda's grid pattern. This plan to

create an 'Imperial Barcelona' represented the aspirations of the more dynamic elements of the Catalan middle classes and Jaussely's criticisms of the *Plan Cerda* (2) were supported by the *Lliga Regionaliste* who saw in Cerda the urban landowner and the centralist spy, neither of which he was.

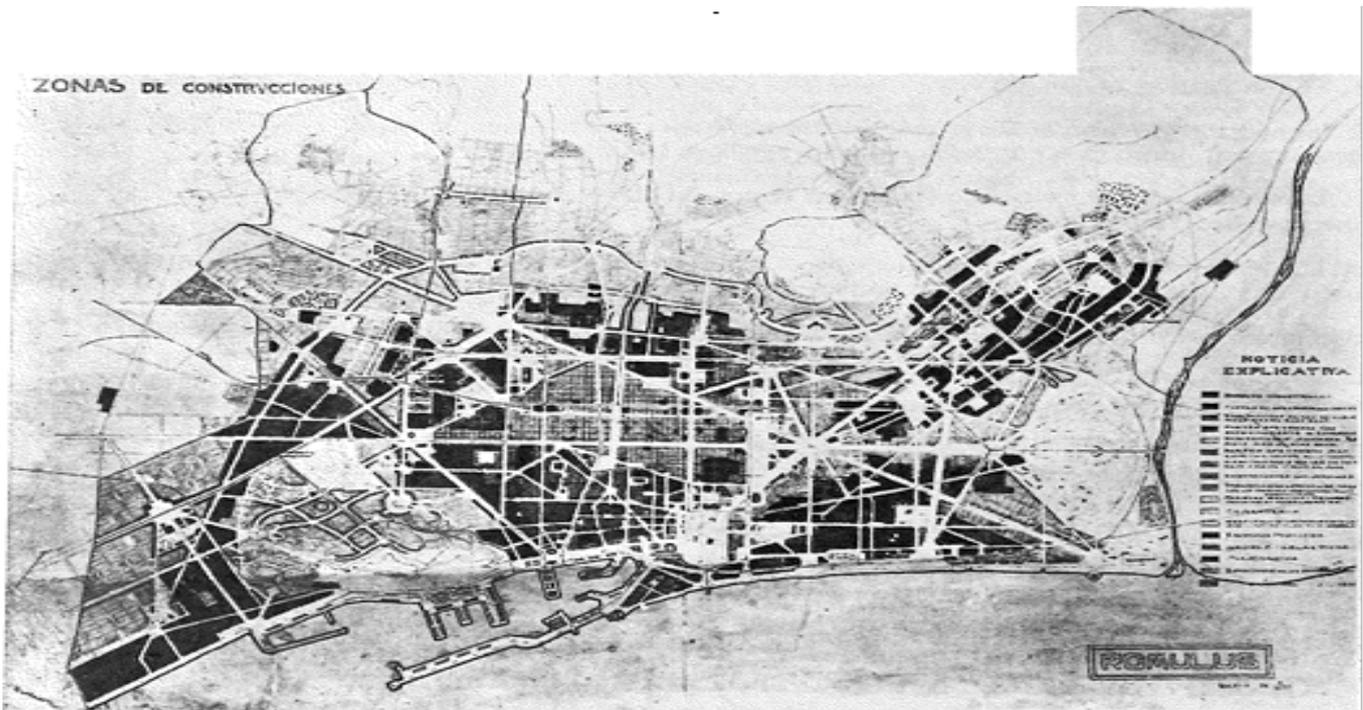


Fig. 6 The *Plan Jaussely*, 1907

(source: *Archivo Historico Municipal de Barcelona*)

Jaussely's proposals for the remodelling of the *Ensanche* were scarcely realistic and it was only after a campaign by the local newspaper, the *Ilustracio Catalana*, that a much watered down version of the Plan was approved in 1917. This was known as the *Plan Romeu-Porcel* after the two municipal architects who modified Jaussely's plan, dropping his proposals for the *Ensanche* and including only the peripheral roads linking the city with the outlying settlements incorporated into the municipality between 1897 and 1903.

This era also displayed certain other advances in the planning and development of the city. In 1916, with the socialist reforming elements for once overcoming the landowning interests in the Council, the *Via Layetana* was constructed cutting through one of the most densely populated areas of the Old City (Fig. 7). Such action was clearly encouraged by the *Anuario Estadistico* (Statistical Yearly) published from 1902 to 1923, which gave extensive statistical information about a wide variety of subjects including population, disease and hygienic conditions in the city.

After 1916, Barcelona was linked with its immediate hinterland by electric train via a mile long tunnel through Tibidabo, the mountain mass backing the city, and buses and the first Metro followed in the 1920s. The 1916 Plan by F. S. Pearson to extend the electric train system to all Catalonia is particularly interesting in that it contains a zoning of the Province of Barcelona in which the city is classified as the commercial centre for the whole region and all industry is relocated inland beyond Tibidabo where abundant hydro-electric power, space and efficient links with the rest of Catalonia would make it an ideal location. This concept of an industrial Barcelona beyond Tibidabo reappeared in Rubio i Tuduri's *Barcelona Futura* Plan of 1929 and later in the *Barcelona 2000* Plan of 1970, which similarly foresaw the transformation of Barcelona city into the commercial centre for the Region, linked to its hinterland by a system of express motorways. This is examined in more detail later.

THE SECOND REPUBLIC AND AFTER

With the fall of the monarchy in 1931 and the advent of the Second Republic, a period of intense, but short-lived, urban activity led by GATCPAC*, the radical Catalan architect/planning group, in collaboration with similar bodies from other European nations (mainly CIAM[^] and CIRPAC+) and in particular with help from French architect and planner, Le Corbusier, was inaugurated. Their five point plan for reform in the city (Table 1) and its embodiment in the *Plan Macia* (1934; see Fig.8) found increasing support among the general public, but the reform programme was disrupted by the Civil War (1936-9) and abandoned with the fall of the city to Franco's forces.

Very little of the *Plan Macia* was carried out. The Old City remained overcrowded with a population density of 1604 inhabitants per hectare in its most crowded neighbourhood. The population of Barcelona passed the one million mark in the early 1930s as the flow of migrants (3) into the city added to the housing shortage. It was largely these immigrant families which lived in the *barracas* (shanty dwellings) that sprang up in the periphery of the *Ensanche* and on the green areas around the city from the late 1920s onwards.

The Civil War resulted in a cultural rupture between Madrid and Barcelona, unparalleled since the end of the War of Spanish Succession two centuries earlier. Centralist policy on Barcelona in the 1940s was largely concerned with its potential as a production centre; economic

*Grupo de Arquitectos y Tecnicos Catalanes para el Progreso de la Arquitectura Contemporanea; [^]Congres Internationaux d'Architecture Moderne; +Comite Internationale pour la Realisation des Problemes de l'Architecture Contemporaine

TABLE 1. The five point plan of reform proposed by GATCPAC in 1932

1. The sanitation of the old city.
2. Immediate cessation of the growth of *Ensanche*' (i.e. Cerda's *manzanas*) and the determination of a new layout, more in accordance with the needs of the city.
3. Classification of the city into functional zones - housing, industry etc. and immediate limitation of the so-called 'mixed zones'.
4. The linking of the city, via an extension of the *Gran Via*, with the coastal area of Castelldefels to be used as a large maritime zone for recreation and relaxation.
5. The modification of municipal regulations in whatever way necessary to achieve the above.

policy aimed at increasing production in the short term by means of a maintenance and reinforcement of established industrial plants, accompanied by a weak but steady growth in services. While post-war reconstruction was concentrated in the *zonas devastadas* (i.e. Madrid and the South), the population of Barcelona increased by 200,000 in the first post-war decade (over half this figure were immigrants) and the housing shortage reached 80,000 by 1950. GATCPAC had been outlawed and dissolved and the effervescent Barcelona of projects and

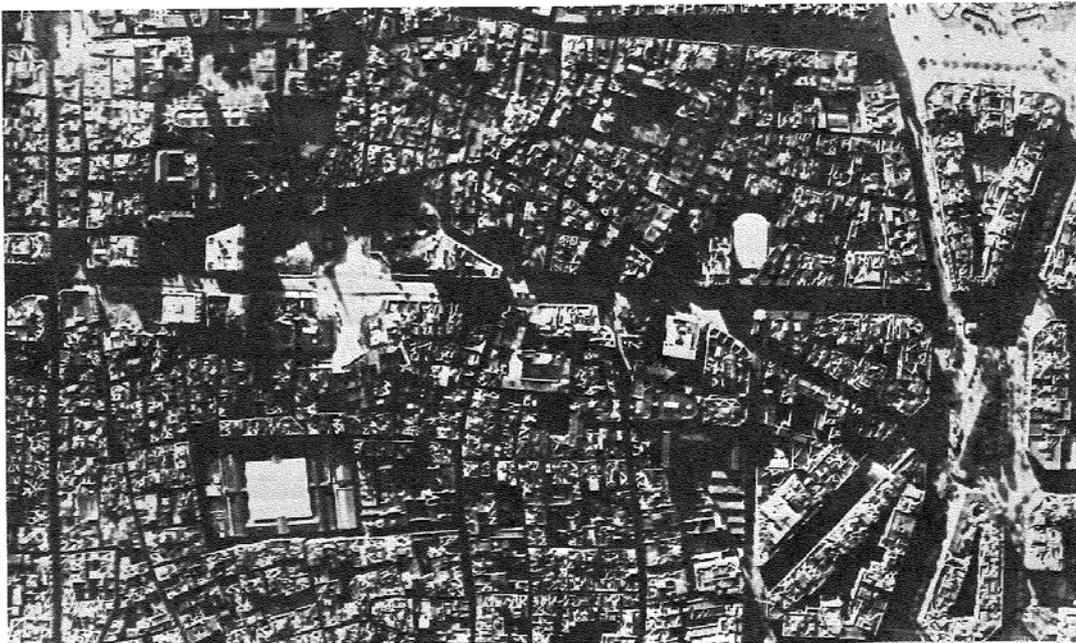
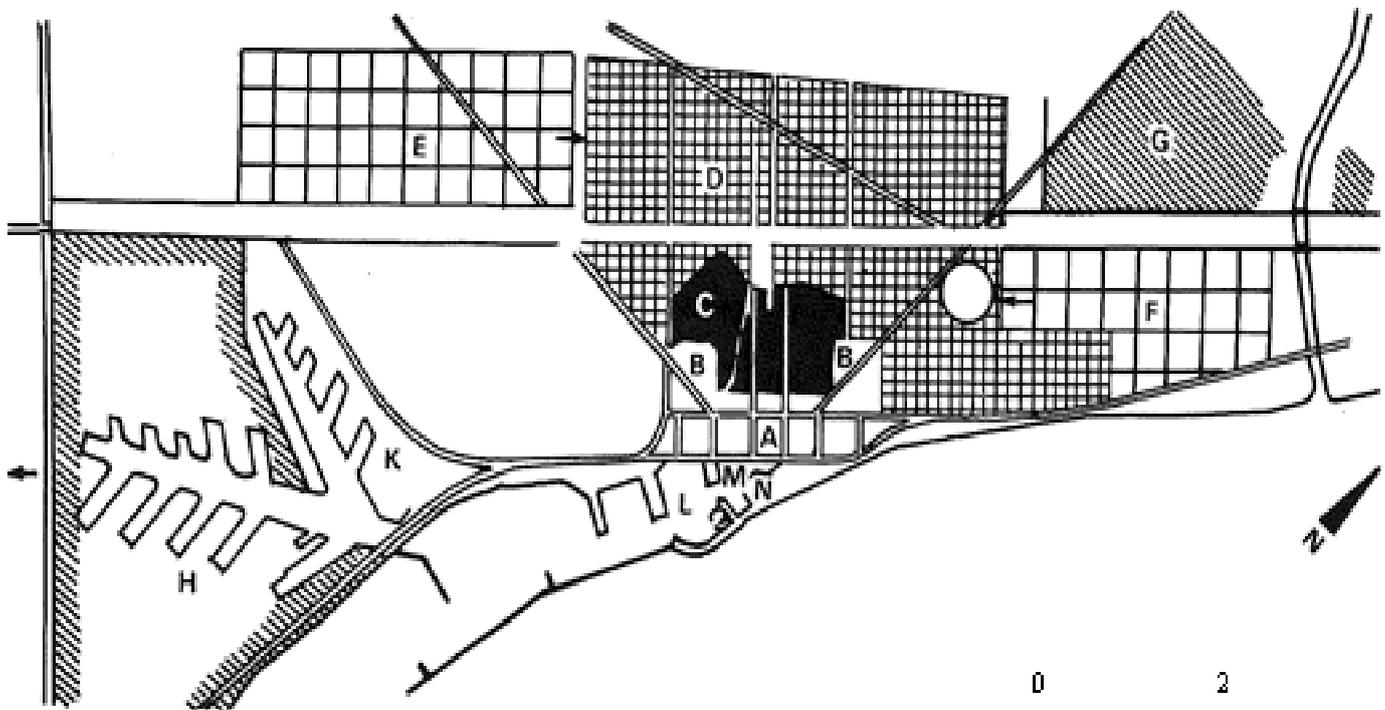


Fig. 7 A section of the Old City at the end of the 1920s, showing the *Via Layetana*, opened in 1916, running right to left (source: *Archivo Historico Municipal de Barcelona*)



KEY

A Administrative Centre	G Industrial Zone	B Civic Centre	H Industrial
Zone	K Cargo Port		
C The Old City	L Passenger Port		
D Cerda's Ensanche	M Maritime Sports Area	F New Residential Area	N Syndical Centre
E New Residential Area			

The Plan also included proposals for a weekend holiday centre ('City of Repose') at Castelldefels, 19km south of Barcelona

Fig. 8 The *Plan Macia*, 1934
(source: *Archivo Historico Municipal de Barcelona*)

urban reform, popular participation and demographic citizen politics had gone. A series of urban problems was tolerated or ignored by the central authorities. The high density development of the central *Ensanche*, the deterioration of the Old City and the 'mixed zones' on the periphery of the *Ensanche*, the housing and service deficits and the shanty towns, all contributed to the grim legacy bequeathed to future planners. While other European cities were being remodelled with new layouts and modern service systems, Barcelona lost the opportunity for post-war reconstruction.

PLANNING AND GROWTH ON A NEW SCALE 1953-77

THE SUB-REGIONAL AND METROPOLITAN AREA PLANS

Although urban planning was of little importance in Catalonia in the 1940s, Provincial planning authorities were created at the end of the decade, producing sub-regional (*comarca*) plans for Madrid, Bilbao, Valencia and, in 1953, Barcelona. The *Plan Comarcal* and accompanying law (3 December 1953) created a new administrative unit - the *Comarca* - consisting of Barcelona and the surrounding 27 municipalities and a new authority - the *Comision de Urbanismo de Barcelona* (CUB) to manage its development.

The *Plan Comarcal* had four principal characteristics: first, the *Comarca* was viewed as a collection of individual nuclei, rather than as one urban continuum; secondly, the plan introduced land zone classifications for the whole *Comarca* whereby building typology, use and volume could be strictly controlled, reflecting perhaps the most important theoretical undercurrent to the plan (Fig. 9); thirdly, Cerda's *Ensanche* was accepted as satisfactorily providing the principal road

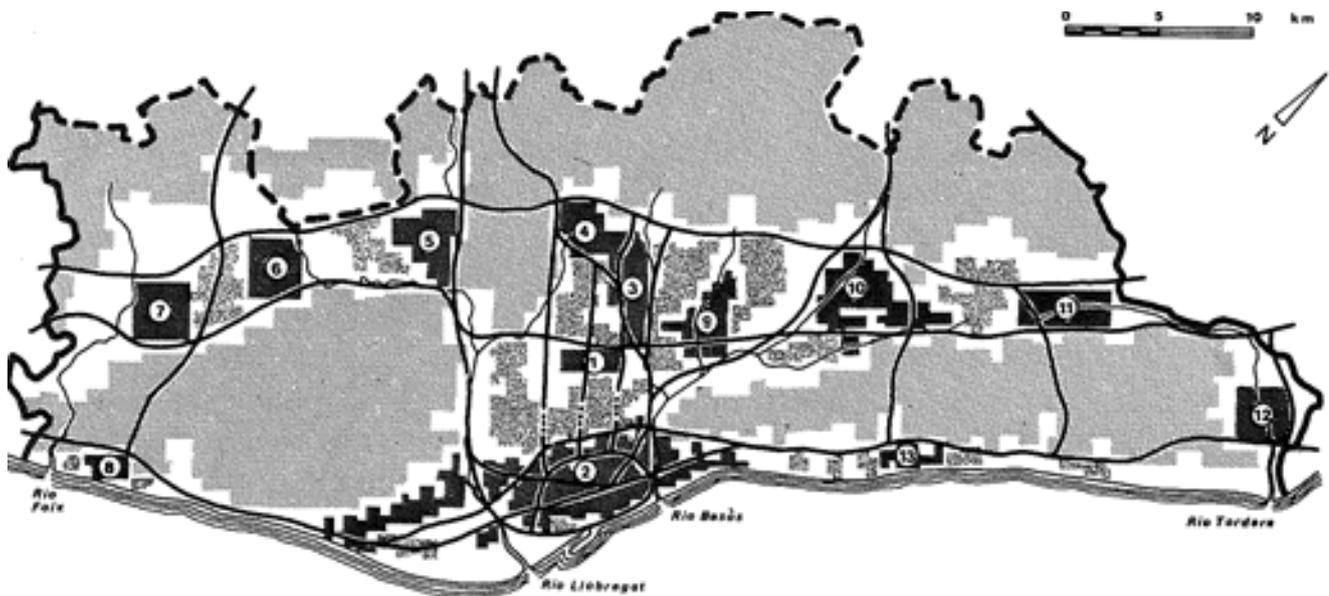


KEY

- 1 Old Quarter 2 Intensive Development of the *Ensanche* 3 Semi-Intensive Development of the *Ensanche* 4 Intensive Urban Residential Development
- 7 Extensive Suburban Development 9 Intensive Garden City Development 10 Semi-intensive Garden City Development 14 Mixed zones of Housing and Industry
- 16 Heavy Industry 17 Light Industry 19 Commercial Areas 20 Monuments; historical, artistic or aesthetic buildings 21 Railway Area 22 Port Area
- 25 Hospitals/Health Service Area 28 Recreational Zone 29 Cemeteries 30 (stippled areas) Urban Park

Fig. 9 The Plan *Comarcal*, 1953, showing land classification zones in the central part of the City (source: 'Documentos 1953-71' by C. Teixidor, M. Tarrago and L. Brau in *Cuadernos de Arquitectura y Urbanisme*, No. 87, Jan.-Feb.1972).

axes of the city; lastly, importance was attached to *planes parciales* (local plans) as a means of realising the general dictates of the plan at local level. Herein, in fact, was the Achilles' heel of the plan, giving private (and public) promoters license to change the original land classifications more or less as they liked.



KEY TO MAJOR URBAN AREAS

- | | | |
|-----------------------|--------------------------|--------------------------|
| 1 Centro Direccional | 5 Martorell | 9 Sta. Maria des Gallecs |
| 2 Barcelona y Comarca | 6 St Sadurn d'Anoia | 10 Granollers |
| 3 Sabadell | 7 Vilafranca del Penedes | 11 Sant Celoni |
| 4 Terrassa | 8 Vilanova i la Geltru | 12 Todera |
| | | 13 Mataro |

Fig. 10 The *Plan Director* for the Metropolitan Area of Barcelona, 1965

(source: *Archivo Historico Municipal de Barcelona*)

During the revision of the *Plan Comarcal* after 1962, the CUB recommended that planning should take place on an even larger scale, at the Metropolitan Area level, covering 193 municipalities, about half the total Province of Barcelona. The *Plan Director*, approved by the CUB in 1965, attempted to reorder the Metropolitan Area of Barcelona (MAB) through the decentralisation of manufacturing and service activities within the new city-territory model (Fig. 10). The plan found increasing support among industrialists and economists as the diseconomies of agglomeration, particularly congestion in and around the city, began to outweigh the external economies. However, it was not until the late 1960s that the central authorities began to acknowledge the importance of the Metropolitan Area Concept (4), and so, while the *Plan Director* remained in the archives of the CUB, the boom of the 1960s brought a demographic and spatial expansion of the *Comarca*, with which the local authorities were incapable of dealing effectively.

INVESTMENT AND GROWTH IN THE FIFTIES AND SIXTIES

In the early 1950s, the housing deficit in the larger cities, and in the nation as a whole, led the government for the first time to accept the problem officially and take a more active role above and

beyond the urban planning legislation of the era. The *Ley de Urgencia Social* (Law of Urgent Social Reform) of 1956 ushered in a series of National Housing Plans by which the government provided financial incentives to private promoters to participate more widely in house construction, while the Central and Local Housing Authorities concentrated on the bottom end of the market, building houses of generally poor quality and of minimum dimensions in residential estates (*poligonos*) which were generally lacking in collective services and were located in the periphery of the *Ensanche* and beyond (5).

Meanwhile, the Barcelona Council followed a policy of investment in road infrastructure (e.g. the *Meridiana* routeway, the ring roads and the Tibidabo tunnels) and basic services (gas, water, electricity) in collusion (6) with the larger economic concerns. In this sense, the activities of the Barcelona Council came to have a very real effect on the development of the city after 1960, when the *Carta Municipal* (Municipal Charter) greatly increased their tax levying powers. The Council's investment policies aimed, on the one hand, at providing the minimum basic necessities to sustain the functioning of the urban system and, on the other, at encouraging the transformation of the city from residential/industrial city to a metropolitan/tertiary centre, thus clearly contradicting the policy of decentralising tertiary activities evident in the *Plan Director*.

These public infrastructural investments provided a framework for large private promoters as capital became increasingly concentrated in the hands of a few large financing groups. This re-orientation of planning was more formally stated in the Barcelona Council's *Barcelona 2000* Plan of 1970, closely linked with Mayor Porcioles' dream of holding a Universal Exposition on Tibidabo in 1982, through which the city would become the tertiary and representative centre of the region, linked to the interior by rapid lines of communication including the Tibidabo tunnels.

The *Plan Comarcal* remained in force until 1976, but private developers, through the use of *planes parciales* and pressure groups within the Council succeeded in changing its original content, it too becoming something of a coordinating plan for what nevertheless remained largely isolated, piecemeal developments outside the Barcelona municipality. The growth of the city in these years clearly reveals the inadequacy of the Land and Urban Planning Act of 1956, which attempted to prevent land speculation and provide a national five-tier planning system, but which, because of its vagueness on certain key issues (e.g. the modification of *Plan Comarcal* by *Planes Parciales*) was widely abused.

POLITICS AND PLANNING IN THE SEVENTIES

During the late 1960s and early 1970s the central authorities introduced a series of measures to aid the decongestion of the country's large cities. The *Plan Director* was given limited support after 1968 (7) and the *ACTURS* Law of 1970 gave the central authorities unprecedented powers to short-cut planning procedure for the construction of eight new cities, including three outside the Barcelona *Comarca*. In 1973, Enrique Maso was appointed Mayor of Barcelona. He represented the 'neo-capitalist' industrialists, supported the concepts embodied in the *Plan Director* and forced through the revision of the 1953 *Plan Comarcal* along rationalist/decongestion lines similar to those of the *Plan Director*, only to be checked by a series of politically motivated actions from Madrid.

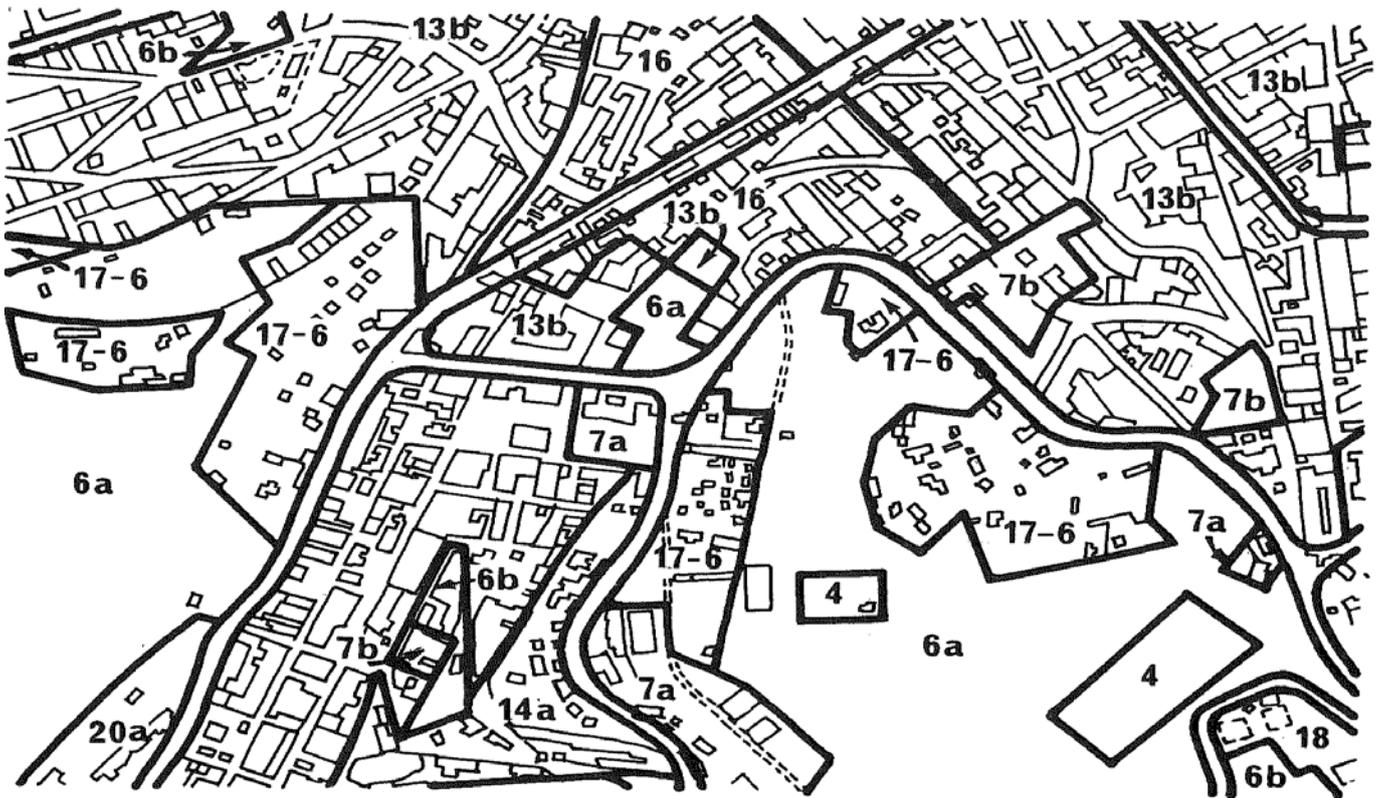


Fig. 11 A section of the *Plan General Metropolitano* of 1976, showing land use classifications in and around the Tres Turons hill area, north of the city, an area of shanty and 'marginal' dwellings.

Of particular significance are classifications 6b (new park areas), 14a (public remodelling), 16 (urban renovation/rehabilitation) and 17-6 (urban renovation/change of use). (source: *Corporacion Metropolitana de Barcelona*).

First, in 1974, the CUB was renamed the *Corporacion Metropolitana de Barcelona*, its executive changed and the Metropolitan Area concept effectively rejected. Secondly, Maso himself was removed in 1975 and replaced by Viola, who, like Porcioles before him, had strong links with the property capitalists. The power struggle within the local authorities had been temporarily resolved

through the intervention of the Madrid Government, although the exact motives for this action remain unclear (8).

The content of the revisions to the *Plan Comarcal* in 1974 was subsequently modified to favour landed interests and property developers, but here again political change at a national level brought an ironic twist. In November 1975, Franco died; Premier Arias Navarro, the last of Franco's Prime Ministers, was replaced by Adolfo Suarez; and, in Barcelona, Mayor Viola was removed from above (i.e. from Madrid) and replaced by Mayor Socias in December 1976 to pave the way for local administrative reform only six months after the modified revision of the *Plan Comarcal* had been definitively approved under the name of the *Plan General Metropolitano* (Fig. 11). This plan, despite its modification between 1974 and 1976, and the *ACTURS* Law of 1970, nevertheless provide a viable framework for effective development control, the re-equipment of the inner areas and the periphery and the remodelling of poor quality housing areas. The key factor will be that the political will should exist in local and central authorities alike to carry these policies through.

SUMMARY 1953-77

Stepping back from the interplay of politics and planning in the 1970s and viewing the past twenty-five years as a whole, the two most significant factors in the growth of the city were perhaps the telling weight of private economic interests in the development process and the failure of the local authorities effectively to exercise their attributed control functions (9). There has been no lack of planning research and legislation since 1953, but the lack of management bodies with the economic and judicial power to make a significant impact on the urban scene has led to an 'urbanism of tolerance' on a large scale.

The central business district has grown rapidly in a disorderly fashion, stretching up along *Diagonal* to *Plaza Calvo Sotelo*. In the old city, decaying housing has been left to get worse; because of the possibility of expropriation by the local authorities, few landlords have bothered much with maintaining or improving their properties; yet renovation schemes are shelved because of the price of land and fragmentation of property holdings.

In the *Ensanche*, the number of buildings constructed has further increased as a result of operations on the margin of the law (*planes parciales, edificios singulares* (10)), giving short-term maximisation of profits (proximity to centre, prestige area) at the expense of longer term social-economic costs (degradation of urban habitat, congestion, lack of service installations). In the periphery, the city has

overflowed into the *Comarca* and beyond where, above all, the immigrant population (11) has encamped in a variety of what may be termed 'marginal habitats' (the old deteriorated urban nuclei, the *barracas* and recent sub-standard residential estates). Planned, rational development has been replaced by piecemeal speculative activities by both private and public entities alike, that have only served to multiply the problems of congestion and lack of satisfactory infrastructure.

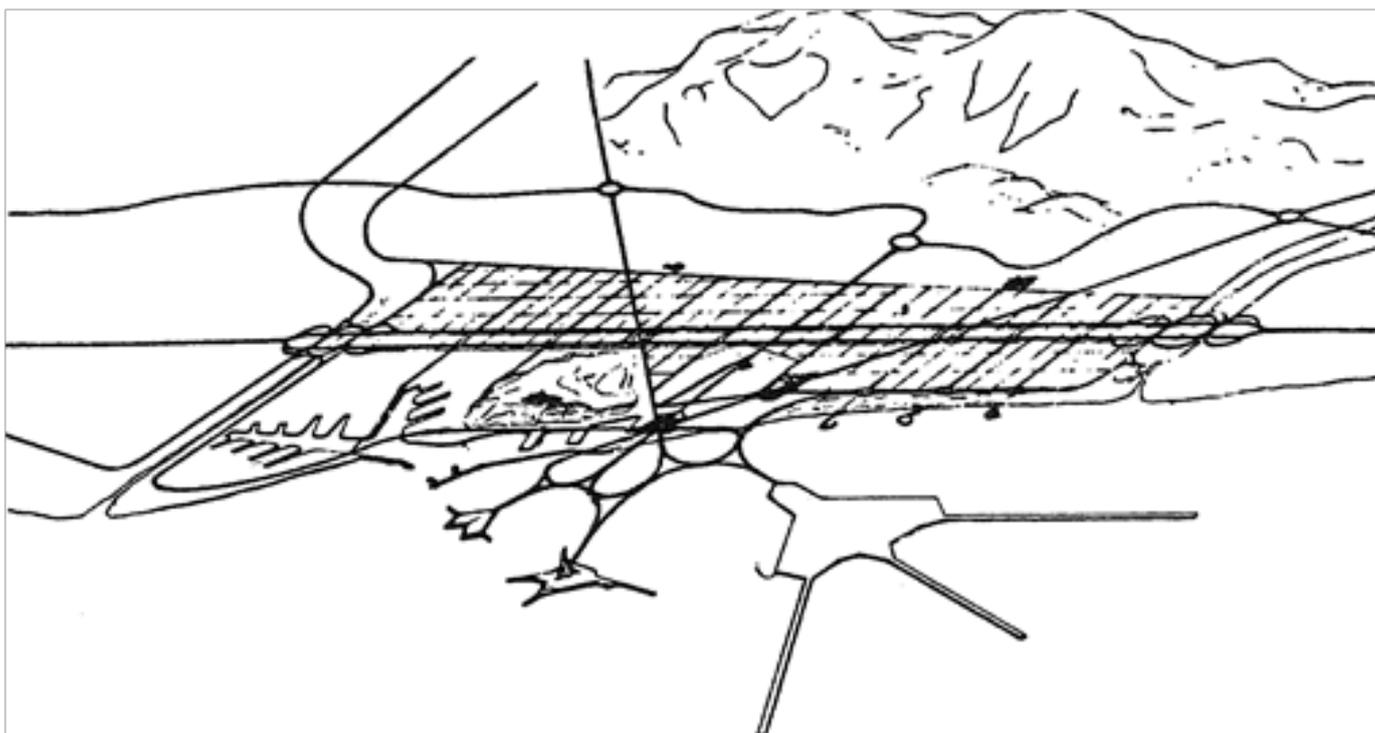


Fig. 12 The *Plan Torres Clave*, 1971 (Schematic plan of the plain of Barcelona)

In its functional zoning and use of advanced technology (e.g. the new airport extending out over the sea) and 'natural' routeways, it shares common ground with the *Plan Macia* and the *Plan Cerdà* (source: *Construcción de la Ciudad*, No. 0. 1972)

Public outcry against the results of the development process has become increasingly vociferous in the last decade. Above all, local residents' associations have campaigned long and hard for an improvement of living conditions in the peripheral housing estates; with the move towards political liberalisation, they have participated directly in plan preparation and implementation processes. At the same time, the sub-regional and municipal authorities are now beginning to take a more important part in the control and management of urban growth. It is perhaps these two elements - public participation and local authority initiatives - that will be of key importance to urban planning in Barcelona in the years ahead.

PLANNING IN HISTORICAL PERSPECTIVE: THE PRESENT DEBATE

In recent years much has been written about various aspects of the plans for Barcelona spanning the past 120 years (i.e. since the growth of the city beyond the mediaeval walls). The 2C group of architects have stressed the 'duality' of these plans, seeing in the Plans of Cerda, Macia and Torres Clave (Figure 12) certain common ground, notably their 'profound character of attempting to transform urban reality, their progressiveness, their utilization of the most advanced technological methods available in their epoch, their democratic character and their superior adaptation to the urban, topographical and geographical structure of Barcelona' (12). On the other hand, the Plans of Rovira y Trias, Jaussely, Rubio i Tuduri, the *Plan Comarcal* and *Barcelona 2000* follow 'the conservative tradition of a more academic, technical, planning, legalising urban processes already underway, the expression of the bourgeois concept of the city *par excellence*' (13). The 2C group sees these two groups of plans as constituting 'counter-positioning of plans that see the city in a dominantly directrix form (around the *Gran Via* - the main cross-town road) with those which see it in terms of radio centric, oil-slick type expansion' (14). Further, it has been argued that the drawing up of the *Plan Cerda* (1859) and the *Plan Macia* (1934) correspond to two periods when the 'hegemony of the dominant industrial/agrarian block was seriously compromised by the upsurge of autonomous intellectual movements, capable of generating programmes of urban reform that implicitly or explicitly contributed to the formation of a complete alternative to the capitalist city' (15). The first of these two breaks started with the revolution of 1854* and ended with the fall of the First Republic in 1874. The second period spanned the years of the Second Republic - 1931-39. These periods, it is argued, produced the rationalist plans of Cerda and Macia.

Sola-Morales, on the other hand, makes little of these supposed breaks in the otherwise unbroken political hegemony of the dominant power block. Instead he stresses the subordination of planning to the needs of capitalist production throughout the period discussed, e.g. 'Given the predominant

* Compared by Estape ¹⁶ with those of 1848 elsewhere in Europe.

mode of production and consequent social structure, planning has been used to favour the dominant classes. Idealism about the independence of planning, as corrector of conflicts is not appropriate' (17). Rather, he stresses the changing needs of capital towards some form of coordination of investment. Carreno Piera, however, emphasises the importance of a form of capitalistic Catalan Nationalism in shaping the urban policy of the local bourgeoisie. He points out that the Catalan middle classes have never been satisfactorily integrated into the power structure of

the Spanish State and because of this, have, by and large, followed a policy aimed at furthering the political/economic influence of the city within Catalonia and the country as a whole: 'In the period immediately before and during the dictatorship of Primo de Rivera (1923-29), the Catalan bourgeoisie did not formulate ambitious plans of territorial *ordenacion*, conscious of their own inability to implement them. Only in the epoch of the self-government of the Generalitat (1932-6), in the Second Republic, were two ambitious plans approved - *Regional Planning* of 1932 and the *Plan Macia* of 1934' (18).

Regional Planning proposed a balanced development for all the Catalan territory, including a decentralisation of economic activities and a brake on the macrocephalism of Barcelona within Catalonia. This and the *Plan Macia* are seen as corrective mechanisms to re-order the imbalances created by the free urban growth of the previous era. Outside this period (1932-36), Carreno Piera argues that the Catalan middle classes, lacking confidence in the political, administrative and financial instruments to effect such 'rationalist' change, attempted instead to affirm the macrocephalism of Barcelona within Catalonia as the basis of maintaining and furthering the economic power of Catalan industry. Bohigas (19) has also pointed out how this macrocephalism has given the city a certain political importance, not only within Catalonia, but within the so-called *Paises Catalanes*.* In this light, one can see the Universal (Metallurgical Industry) Exposition of 1929 on Montjuich and that planned by Mayor Porcioles for 1982 on Tibidabo as attempts to confirm Barcelona as the tertiary and quaternary centre within an ever growing hinterland.

THE SIGNIFICANCE OF CERDA

The theories outlined above add to our appreciation of the historical significance of the various urban plans for Barcelona and contribute to an understanding of how the development process

**Paises Catalanes* (Catalan Countries) include Catalonia and the coastal area down to Valencia, the Eastern Pyrenees, Andorra, the Perpignan area of France and the Balearic islands

has functioned in practice. Many questions, however, remain unanswered. The supposed breaks in the political hegemony of the dominant power block (1855-74 and 1931-39) did not last long enough to show whether the new found allegiance between certain elements of the bourgeoisie and the working classes, which some claim to have existed, would have been strong enough to carry through the 'rationalist' corrective measures such as those contained in the *Plan Cerda* and the *Plan Macia*. In this context, the present debate surrounding the *Plan Cerda* is particularly relevant.

Following recent research by Domingo (20) and, above all, by S. Tarrago and Soria y Puig (21), little doubt now remains about the scientific rigour with which Cerda approached the urban problems of his time, and the importance of the idealised model, involving a functional specialisation and egalitarian hierarchialisation of space, on which he based his plan. But it is in his plan itself, in the adaptation of his model to what he considered practically possible (as regards both physical and socio-economic realities), that evidence can be found to suggest doubts about the existence of a new 'cultural hegemony' (22).

Grau's study (23) of the plan reveals the significance of the concessions Cerda had to make: the adjustments to the road pattern in the *Ensanche* to preserve, in the main, factories, creating a hidden barrier that was later to encourage the spread of industry eastwards towards the River Besos; the preservation of factories in the old city in an area (San Pedro) vital to the effective connection between the old and new city; and the exclusion of the outlying settlements of San Gervasio and most of Gracia from the *Ensanche*, these being the main secondary residence areas of the bourgeoisie. Grau's analysis suggests that Cerda had to give way on these counts in order to impose the basic elements of his plan and that the 'rationalist' measures were rather the product of Cerda's own egalitarian convictions, lacking wider-based support amongst the local bourgeoisie. Indeed, his plan was rejected by the local Council and only passed on insistence from Madrid.

These doubts are supported by the development of the *Ensanche* after 1860, Cerda's functional zoning and polycentric development being broken from the start. Further, the period after 1874, when the First Republic fell and the monarchy was restored, nevertheless produced the urbanisation around the Born market by Fontserè, considered one of the most sophisticated urban spaces in the city, Baixeras' s ambitious Plan of Interior Reform for the city of 1880 and accompanying Law of Forced Expropriation, and Faria's remarkable 'Project of Drainage and Sewage Disposal for Barcelona' of 1893 (24). Although it is true that the projects of Faria and Baixeras were thwarted by the power of vested interests within the Council, it is still difficult to see any real justification for pinpointing 1874 as a watershed with 'rationalist' proposals (*Plan Cerda*) on one side and growth orientated conservatism on the other.

THE CONTINUITY OF EVENTS

Other incongruences surround the 1931 'break'. What was the significance of Rubio i Tuduri, *noucentist* (a branch of modernism) architect who produced the *Barcelona Futura* Plan in 1929,

seen by the rationalist school as 'expansionist' and who, just three years later, drew up the *Regional Plan* for Catalonia, seen as ambitious, ahead of its time, and generally in keeping with the ideals of GATCPAC? Architect Vilaseca drew up his plan for reform in the old city (based very much on previous plans of Baixeras and Darder) under the Dictatorship (1923-29), presented it in 1932, and although it was harshly criticised by GATCPAC, it was approved by the Council in 1934 and then again after the war in 1943.

Although GATCPAC built the *casas obreras* (workers' houses) and the *Casa Bloc* (a complex of 207 houses in 2 connected 'L-shaped' blocks), it was the *Patronato de la Habitacion* (Municipal Housing Authority) who built the first public housing area (Eduardo Aduano) under the full repression of the Dictatorship in 1929. The garden-city concept, first promoted in Spain by the modernist architects in the early 1900s on a large scale (*Parque Guell*) and later in self-sufficient suburban form largely under the guidance of Cebria de Montoliu after 1914 (25) was criticised by Le Corbusier and GATCPAC and yet still seemed to influence their work. In the *Casa Bloc* scheme, they planned the division of a large orchard, allotting one plot per house. Again, in the 'City of Repose and Vacations' at Castelldefels, the same idea reappears.

These facts do not necessarily contradict the historical perspectives previously mentioned, but suggest rather that they mask the full picture. There seems a certain continuity running through most of the period studied, which at times seems more significant than the supposed 'breaks'. In this sense, Sola-Morales' thesis seems more acceptable than that of the 2C group. Perhaps history has been used to try and lend weight to political arguments and so perspectives have been angled in unjustified ways. Note, for example, the criticism of the *Lliga Regionaliste* in the 1900s and above all that of architect Puig y Cadafalch, levelled at Cerda's work. At one stage, hatred reached such a peak that Puig demanded that all remaining copies of Cerda's *Teoría General de la Urbanización* (26) be burnt. In this case, the criticism of Cerda was clearly inspired by anti-centralist feeling, the *Plan Cerda* having been 'imposed' on the Catalans from Madrid.

Similarly, the views of the 2C group of architects in recent years seems influenced by their desire to associate the Plans of Cerda and Macia with their own creation, the *Plan Torres Clave*, and thereby criticise the present urban chaos. Although such criticism seems quite justified, what does seem rather unfair is to group the *Plan Comarcal* of 1953 in with those of Rovira y Trias, Jaussely and Rubio i Tuduri (1929). What they seem to do, just as the early critics of Cerda's work did, is to confuse the urban reality of the past twenty five years with the original content of the plan, two totally different concepts.

CONCLUSIONS

There remain, nevertheless, a series of general statements that would seem to be beyond reasonable doubt. The development of the city has been directed by landowning, financial and industrial interests, which have paid little regard to the content of approved urban plans. Planning has been characterised by the lack of effective implementation; ironically, the Plan that has been 'realised' more than any other (but equally, bastardised more) is the *Plan Cerda*, probably the most utopian of all the plans discussed. The plans of Cerda and Macia do seem to have some common ideology, which the other plans do not have. What is lacking, however, is any detailed understanding of how the various strands of planning thought evolved individually and collectively over the whole period discussed and how the development process functioned in practice.

Research into the work of Cerda has revealed a great deal about his work of over a century ago. Since the centenary of his Plan (1959), a whole era in the history of the city has been re-examined with quite startling results, particularly in the past five years, involving a total re-evaluation of the significance of his work and the era in which he lived. It can be supposed that future research, as much into the development process itself as into the make-up and underlying ideology of individual plans, will throw new light on established theories. A lot more is now known about Cerda; but from over a century later, the intervening period poses many questions that have yet to be satisfactorily answered.

NOTES AND REFERENCES

- (1). Garriga y Roca was a municipal architect chosen by lottery in 1857 to draw up the main plan of *Ensanche* for the city. In 1858, however, reservations previously held by the military authorities about preserving the lateral walls of the city were withdrawn and so Garriga y Roca's plan became obsolete. The Council then held a competition to find a new plan, the winner being that of Rovira y Trias in 1859. But to the anger of some of the Catalan bourgeoisie and the municipal architects, the central authorities insisted that Cerda's Plan be approved as the plan of *Ensanche* for Barcelona.
- (2). Some of Jaussely's criticisms of Cerda are clearly unjustified, e.g. Jaussely alleged that the Plan Cerda was deficient in the provision of collective services.
- (3). Immigration into Barcelona reached a peak of 82,000 in 1924. This, however, was an exceptional year, and the annual immigration averaged 5,000 from 1925 to 1929 and exceeded 10,000 in 1930, 1934, 1935 and 1937; it exceeded 25,000 in 1938.

(4). This was clearly indicated in the Third National Development Plan (1972-75), which introduced a hierarchical classification of urban areas (*Vertebración del Territorio*) of which *Area Metropolitana* was the largest.

(5). For a general discussion of the development of housing policy in Spain, 1956-70, see King, John C., 'Housing in Spain', *Town Planning Review*, Vol. 42, No. 4 (October 1971), pp. 381-403.

(6). The scandals and rumours of corrupt practice under the mayorship of Porcioles (1957-73) are many. For further details, see Marti. F. and Morena, E., *Barcelona, a donde vas?*, Barcelona, Editorial Dirosa, 1974; or '*La Barcelona de Porcioles*' (various authors), *Construcción, Arquitectura y Urbanismo*, No. 21, (September-October 1973).

(7). The judicial difficulties in getting the *Plan Director* approved lay in the fact that the Land and Urban Planning Act of 1956 did not recognise this administrative level (Metropolitan Area) but rather the local/municipal/sub-regional, Provincial and National levels. In 1968, the Government approved the plan as a *Plan Provincial* for part of the Province of Barcelona

(8). There is considerable speculation over the exact reasons for the central government's intervention against Maso, the *Plan Director* and the Metropolitan Area concept after placing considerable emphasis on the Metropolitan Area concept in the Third Development Plan. As Teixidor has said, 'many observers have reached the conclusion that . . . it has been a political decision - a question of impeding the formation of an administrative entity, that, because of its size and power, would have served as a platform for Catalan Nationalism . . . Some observers see it as an answer to the bitterness of the class fight that has surrounded the new *Plan Comarcal*, the Central Authority intervening to contain, by decree, this dynamic situation. But there is also another aspect: underlying the whole affair is a determination to keep the local industrial bourgeoisie in place'. Teixidor, C., '*Urbanismo - La Entidad Municipal Metropolitana*', *Construcción, Arquitectura y Urbanismo*, No. 27, (September- October 1974).

(9). Article 10 of the law of 3 December 1953 charged the CUB with 'looking out for infringements of the approved plan (the *Plan Comarcal*). To such effect it has the power to order the stoppage or destruction of works and to impose fines of up to 50,000 pesetas'.

(10). *Edificios Singulares* (Extraordinary Buildings), despite contravening building height regulations, were permitted because of ambiguities in the Land and Urban Planning Act of 1956 that made provision for special cases, but was not specific enough about the definition of such cases. This loophole enabled developers to build 15-20 storey buildings in the central *Ensanche* in the late 1950s and 1960s in areas with restrictions of 8-12 floors maximums in the *Plan Comarcal*.

(11). By 1970 over half the people living in the Municipality of Barcelona were non-Catalans.

(12). Group 2C, '*Los Planes de Barcelona*', *Construcción de la Ciudad*, No. 0, (1972).

- (13). Ibid.
- (14). Ibid.
- (15). Roca, F., '*Cerda despues de Cerda*', *Cuadernos de Arquitectura y Urbanismo*, No.100, (January-February 1974).
- (16). Estape, F. (Ed.), *Teoria General de la Urbanizacion y Aplicacion de sus Principios y Doctrinas a la Reforma y Ensanche de Barcelona*, Barcelona, Editorial Ariel, Editorial Vicens Vives, IEF, 1968.
- (17). Sola-Morales, M., '*De la Ordenacion a la Coordinacion*', *Construccion, Arquitectura y Urbanismo*, No. 22, (November-December 1973).
- (18). Carreno Piera, L., '*Proceso de Suburbializacion de la Comarca de Barcelona*', *Ciudad y Territorio*, No. 1/76, (January 1976).
- (19). Bohigas, O., *Barcelona entre el Plan Cerda i el Barraquisme*, Barcelona, Edicions 62, 1963.
- (20). Domingo, M., '*Consideraciones sobre el Plan Cerda*', *Construccion, Arquitectura y Urbanismo*, No. 19, (May-June 1973).
- (21). Soria y Puig, A. and Tarrago, S., *Ildefonso Cerda 1815-76*, Barcelona, Colegio Oficial de Ingenieros de Caminos, 1976.
- (22). AHUAD, '*Hacia una nueva cultura hegemonica*', *Cuadernos de Arquitectura y Urbanismo*, No. 100, (January-February 1974).
- (23). Grau, R., '*La Barcelona Industrial en la Obra de Cerda: Un Ejemplo?*', *Cuadernos de Arquitectura y Urbanismo*, No. 100, (January-February 1974).
- (24). Faria is seen as one of the few *continuadores* of Cerda. He planned a subterranean sewerage system, with automatic cleaners powered by the discharge of large quantities of water that periodically passed through the whole system.
- (25). For further information on Cebria de Montoliu, see Roca, F., '*Cebria de Montiliu y la Ciencia Civica*', *Cuadernos de Arquitectura y Urbanismo*, No. 80, (January-February 1971); and Wynn, M. G. and Smith R. J., 'Spain - Urban Decentralization', *Built Environment*, Vol. 4, No. 1, (March 1978).
- (26). Cerda, I., *Teoria General de la Urbanizacion y Aplicacion de sus Principios y Doctrinas a la Reforma y Ensanche de Barcelona*, Barcelona, Imprenta Espanola, 1867. In the 1970s, Domingo, op. cit., has claimed that this work reveals Cerda as the 'founder of an urban science, preceding Baumeister, Stubben, Unwin, Triggs and Haverfield'.