

# **The anatomy of urban sprawl in the Mediterranean region: the case of the Girona districts (1979-2006)**

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The Spanish way towards globalisation was induced and sustained by growth of the tertiary sector as well as the real estate boom. In this context, the regeneration and expansion of cities developed at the same time as the great expansion of places for leisure and second homes. The theoretical part of this research, a doctoral dissertation, lies within the framework of the dispersed city phenomenon and is based on the hypothesis of convergence towards a global urban model. The empirical part demonstrates this proposition with a study of 522 zone development plans in the Girona districts (located on the northern edge of Barcelona's metropolitan region) from 1979 to 2006. The conclusion is the consolidation of three morphological typologies: urban extensions, low-density housing estates and industrial parks. While urban extensions are related to the compact city model, low-density housing estates and industrial parks are associated mainly with urban sprawl. This duality reveals the transition to a new dispersed urban model that reflects globalisation, shortcomings of planning for urban growth and the post-modern culture.

**Key words:** urban morphology, urban planning, globalisation, urban sprawl, postmodernism.

## **1. Introduction**

This study is a summarisation of a doctoral thesis aimed at analysing the urbanisation process in the Girona districts from 1979, the year of incorporation of the democratic councils, to 2006, just before the recent recession. This area, located northeast of Barcelona, is a significant case of the transformations that have affected Spain and the western Mediterranean coast.

The work focused on the analysis of zone development plans, the documents that regulate zoning under the local development framework in each new area of developable land. A zone development plan contains an explanatory report of a project, its basic information (land use, area, number of housing units and developer) and its cartography.

The interpretation of the results was based on two complementary scales, the regional level, with the aim of analysing the urban model from a scale appropriate for understanding the dynamics of urban sprawl, and the scale of place, in order to understand it on the basis of its morphological typologies. A study of this kind is a pioneer study in Spain because of the time dimension (almost three decades) and the magnitude of data analysed (211 municipalities and 522 zone development plans). For the first time this information has been made available on-line.

## **2. The political, economic and social framework: from *desarrollismo* to globalisation**

*Desarrollismo*, or development at all costs, is the Spanish version of Fordism during the Franco regime, involving high growth associated with industrialisation and tourism during the 1960s and first half of the 1970s. Rapid growth and the possibility of large profits consolidated an urban model based on non-compliance with the standards defined by the Land Act of 1956 (*Ley del Suelo*). Its legacy was the consolidation of a dense and non-contiguous urban form, which is, as Leontidou pointed out (1990), a common distinctive fact of the urban transition in Mediterranean Europe.

The study period begins with the transition to democracy, culminating in 1979 with the transfer of spatial planning authority to the historical regions (Basque Country and Catalonia) and the establishment of democratic town councils. At this time, the government started a review of municipal planning that aimed to improve cities and reverse the pathologies of the previous period. The conjuncture of a recession led to a slowdown in urban development activity.

Starting in 1986, the restructuring of the production system and Spain's entry into the European Union (EU) marked the beginning of a new growth cycle based on the tertiary sector and real estate. It started the so-called "housing bubble" (Naredo and Montiel, 2011), one of the distinctive phenomena of the Spanish model in the context of globalisation. Its causes were specialisation in residential tourism, the reduction in the number of persons per household and the middle-class view of housing as an investment. All of this reinforced supply, resulting from a coalition of large real estate companies and the financial sector, as well as a solvent demand that, despite successive increases in housing prices, made it possible to purchase homes thanks to easily acquired mortgage loans.

Planning policy facilitated this irresponsible dynamic. On the one hand, local authorities started a competition to increase the supply of land and attract potential investments. This was, in many cases, their main source of income. In addition, regional administrations, as is the case of Catalonia, did not implement regional land planning instruments (Esteban, 2003; Burriel, 2008). The result, given the improvements in road infrastructure, technology and differentials in the income from land, was an expansion in urban development without co-ordinated planning.

Thus, urban sprawl —the phenomenon of dispersion, reduction in density and separation of uses in the advanced capitalist city (Bruegmann, 2006; Couch, Leontidou & Petschel-Held, 2007; Indovina, 2009)— in its Spanish version was characterised by certain variables related to planning and the economic and social structure (see Muñoz, 2004; Font *et al*, 2004). Likewise, various international authors have shown how the newly global urban form is made up of new morphological types, portraying both the new location patterns of economic activities and residence of the postindustrial city as well as the traces of post-modern culture (Knox, 1991; Gospodini, 2006; Phelps *et al*, 2006). The case study of Girona districts provides some evidence of the mentioned topics.

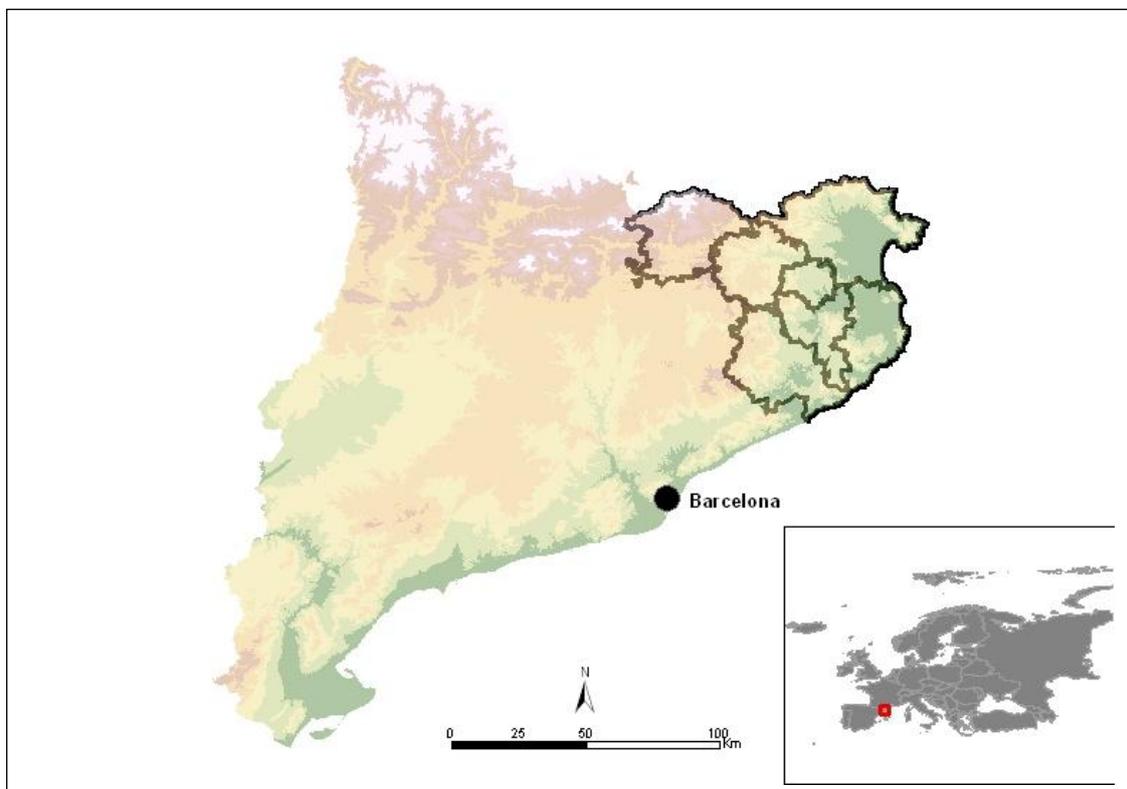


Figure 1. The Girona districts in the context of Catalonia and Europe

### 3. The case of the Girona districts (1979-2006)

The Girona districts are one of the seven planning regions in Catalonia. This is an area of 5,500 km<sup>2</sup> and 700,000 inhabitants organised around Girona, a medium-size urban area of 150,000 inhabitants, which in turn is the nexus of a system of small-scale urban areas (Figueres, Olot) and a group of coastal tourist municipalities. This aggregate is closely linked to the metropolitan region of Barcelona (MRB), an urban area of international relevance with nearly 5 million people.

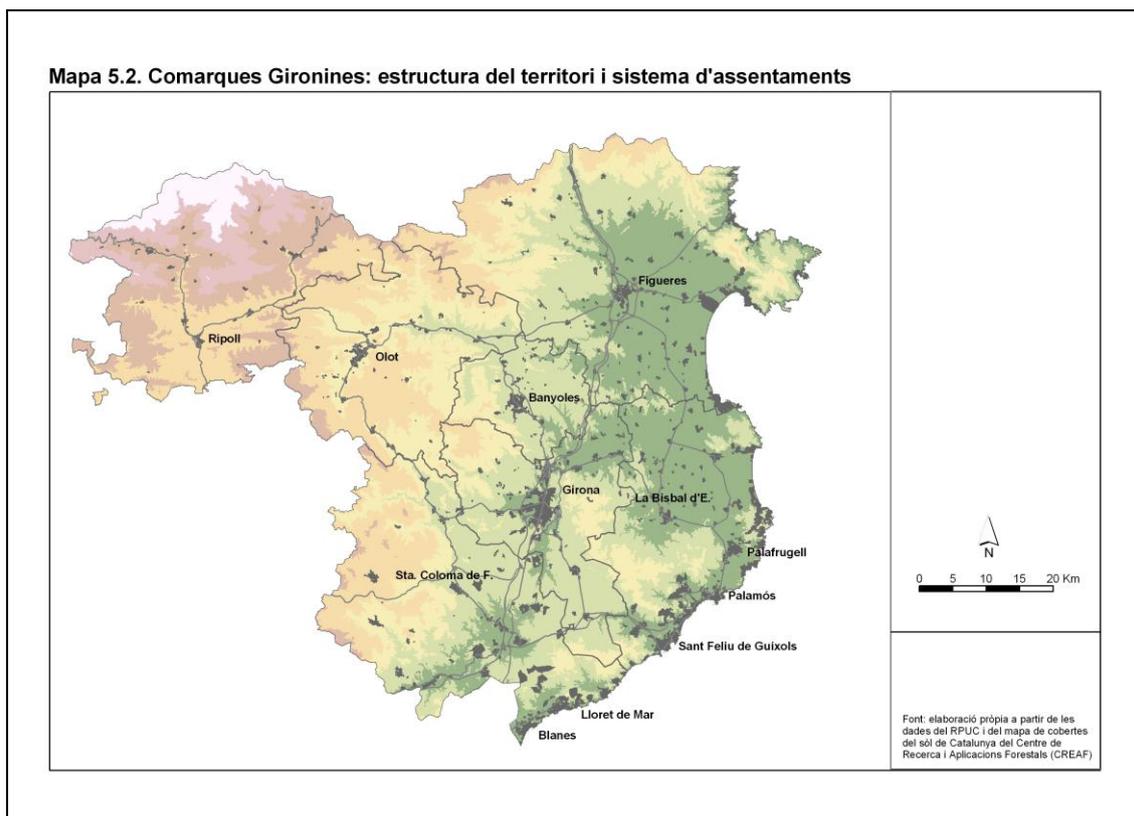


Figure 2. The Girona districts settlement system

#### 3.1 The planning scenario

In 1979, after the *Generalitat* (the regional government) had assumed the authority for urban planning, the main municipalities of the Girona districts began revising their local

development frameworks. These new frameworks projected future scenarios for a period of 15 to 20 years.

The first democratic local development frameworks aimed at moderating growth, repairing the urban fabric and resolving the deficiencies inherited from the previous period. In this context, the concept of the zone development plan emerged as the basic tool to define the morphology of the city in detail and gain public space and facilities. But in practical terms, there were problems. On the one hand, there were huge pockets of developable land and numerous illegal activities which had to be incorporated into the new development schemes (for example, Lloret de Mar, 706 ha; Vidreres, 613 ha). On the other hand, the new supramunicipal schemes for the urban areas (Girona and Figueres were prime examples) rapidly broke down after the regional elections in 1980, as the new centre-right government believed that planning was a municipal affair.

As a result, municipalities begin designing plans according to their own expectations and many of them became oversized. For example, in 2000 a third of the local development frameworks in the urban area of Girona and the coast municipalities delimited urbanisable land area at the same size or above what was already built. Moreover, in many cases, schemes were deployed from scratch during the 1990s, and therefore this was not attributable to the inertia of the previous period. So new planning policies involved two types of paradoxes. On the one hand, factors of inertia as well as irresponsible management turned some new schemes, *de facto*, into expansion and growth plans. On the other hand, while core towns tended to appear well designed in terms of morphology and facilities, in small municipalities a web of plans was woven, designed to compete in setting the effects of city spread.

### 3.2 The urbanisation model

From 1979 to 2006, 522 zone development plans were approved in the Girona districts involving 5,930 hectares (ha). 70% of the developed land consisted in new plans and 30% were illegal projects started during the period of *desarrollismo* and subsequently regularised.

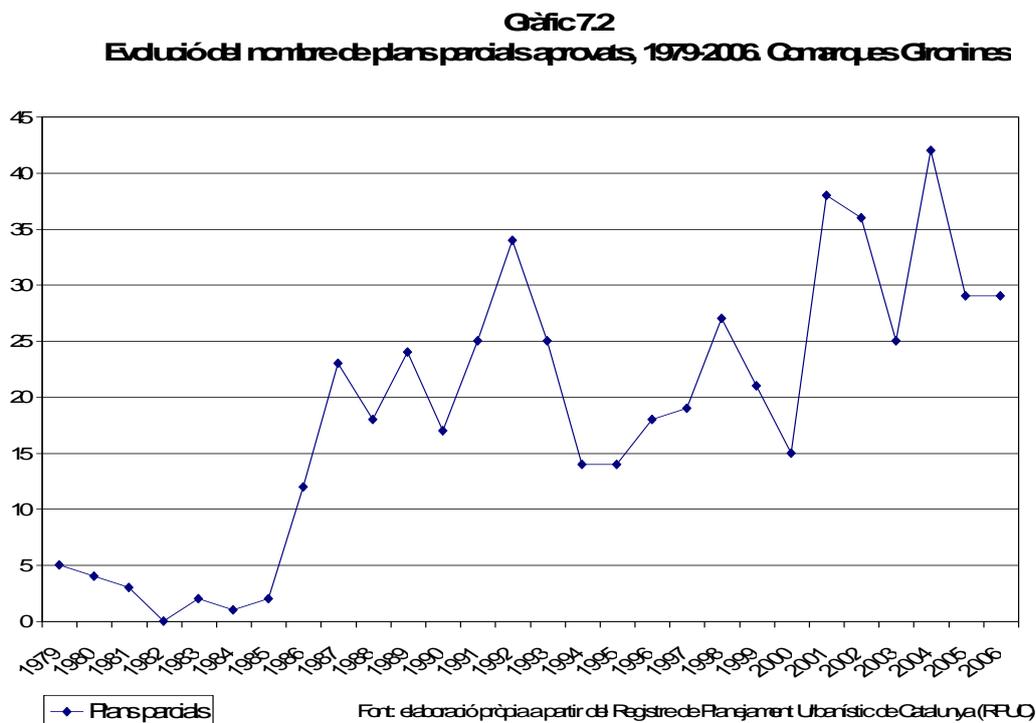


Figure 3. Zone development plans approved 1979-2006: temporal growth

The time frame covered four stages. The first extended from 1979 to 1985 and was linked to the recession of the 1970s. The second extended from 1986 to 1992, and was marked by the start of the first cycle of high growth associated with the recovery of the economy and Spain's entry into the EU, which meant the arrival of investments. From 1992 to 1995, there was a recession that was dealt with by devaluation of the currency, greater flexibility in the labour market and deregulation of the economy. A second cycle of expansion began in 1996 and extended, with little change, until 2006. This latest

cycle of expansion was even stronger than the first in terms of the zone development plans approved (54%) and its duration (more than ten years).

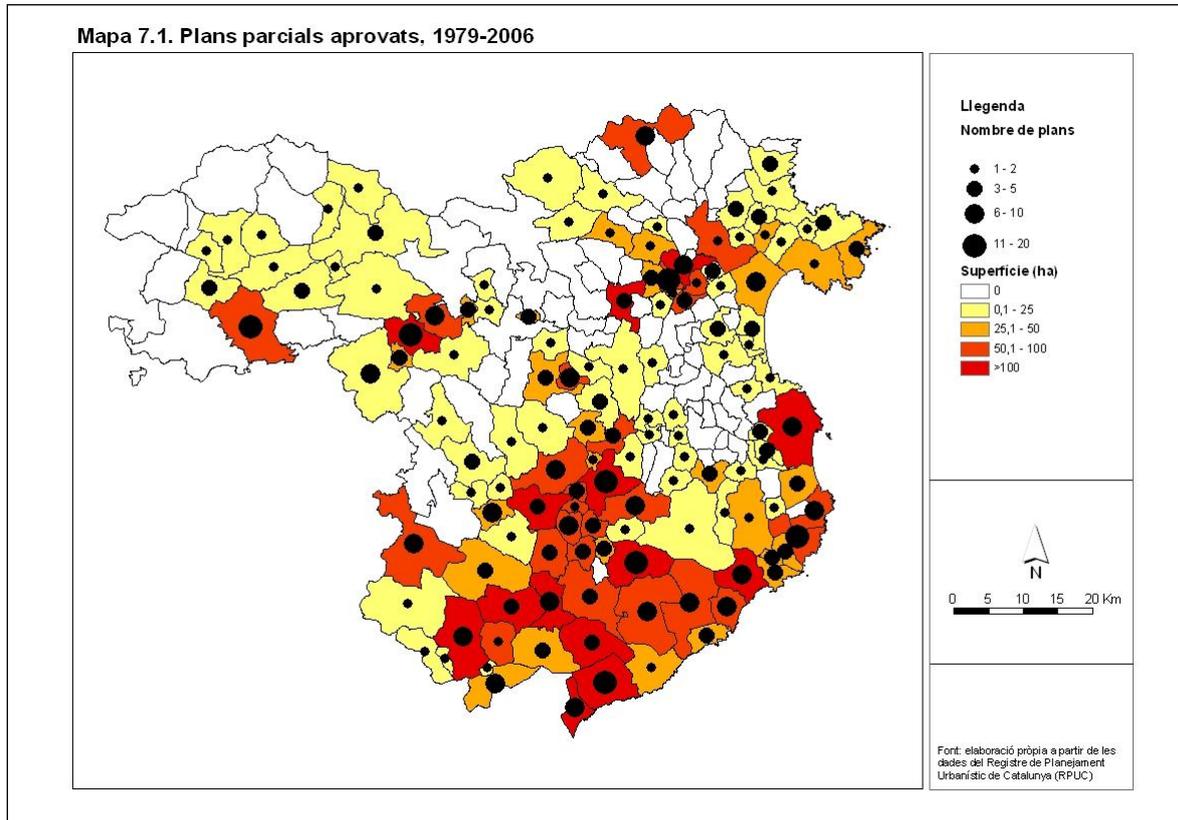


Figure 4. Zone development plans approved 1979-2009: spatial distribution. The size of the dots indicates the number of plans and the colour plots the hectares developed.

As regards spatial distribution there were three main areas. Firstly the coast, which experienced high growth linked to the transition from traditional tourism (Fordist model) to residential property tourism. Moreover, for the first time this process also affected the nearby hinterlands (second-line municipalities further inland from the coast). Secondly, the urban areas, where development involved not only core towns but, especially, municipalities in the surrounding areas, which grew more (in the case of Girona urban area, for example, the 76% of the plans were deployed out of the core town). Thirdly, the “network areas”, namely the municipalities located on the road

corridors linking Girona with other urban areas, the coast and the MRB, in which new linear developments and centres emerged in a sort of reversal of the traditional central places. In short, there was significant growth in towns but the most important thing was the spread of urbanisation across the Girona districts.

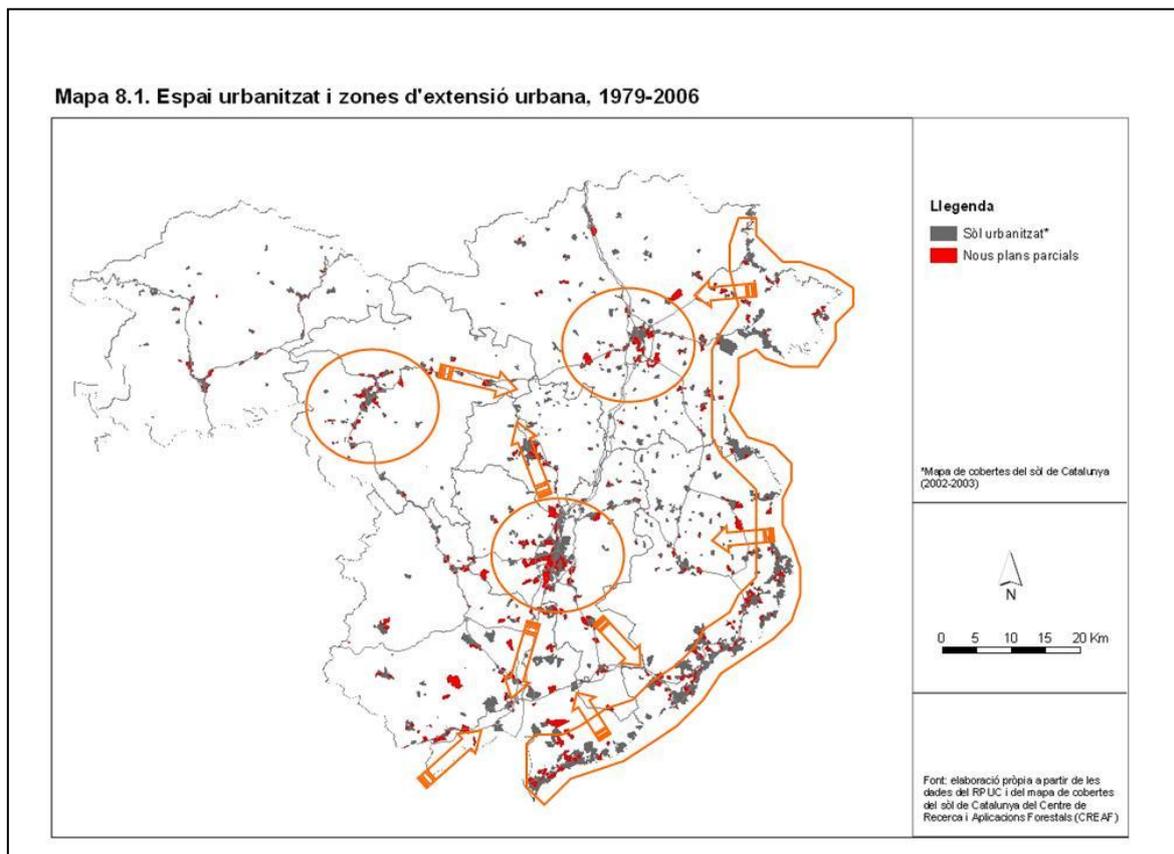


Figure 5. Urban extension areas 1979-2006. Grey areas indicate original settlements and red areas the new plans approved from 1979 to 2006

As regards sprawl, a broad notion was used which included not only physical breakdown dispersion (the most obvious) but also that resulting from the absence of agreement between the dimension of a zone development plan and the size of the original core. The result was that 40% of the zone development plans were dispersed and represented 60% of the area. Of this 60%, half corresponded to plans from the previous period, later regularised, and the other half, unfortunately, to new plans. This

problem particularly affected the small municipalities on the coastline, second-line coastal municipalities and those in the ring of urban areas, and seemed to be linked to oversized local development frameworks or "*a la carte*" revisions and "on demand" modifications of them. In these cases, developers moved to the hinterland, where they found not only cheaper rural land but also local administrations more likely to rezone it. After initial approval of the zone development plans, developers, municipalities and even unions pressured the regional planning authorities to approve them, allowing high capital gains for the private sector. In short, sprawl emerged, in many cases, as the result of "free-riding" land use practices by urban developers with the consent of the administrations and the absence of land use planning co-ordination. Only action by environmentalist groups resulted in stopping some of these projects (for example, the plans for Castell and Pinya Rosa beaches).

### **3.3 The morphological typologies**

The classification of zone development plans suggests that the urban land use model developed from three morphological types: urban extensions, low-density housing estates and industrial parks.

The first typology is urban extension (236 zone development plans of this kind were approved, that is, 46% of all plans and 26% of the total area). Urban extensions are compact housing estates with medium-high densities (the average is 34 housing units/ha). The concept of a compact, regular layout divided into blocks with buildings aligned along the street dates back to the pioneering idea of Ildefonso Cerdà and his extension for Barcelona, developed in the second half of the nineteenth century and early twentieth century. With the advent of democracy this model, with little

transformation, became the quintessential formula for modelling urban morphology and gaining public space. From a social perspective, the solutions with reasonably high densities led to the creation of new urban environments with mixed commercial and public spaces (plazas, avenues and facilities) that fostered community relations. From an environmental perspective, this meant growing with low per capita land consumption and developing compact urban environments that facilitated travel over short distances. Thus, because of its characteristics (compactness, density and mix of uses and social groups), urban extension represents the best continuity of the Mediterranean city model.



Figure 6. Urban extension

The second typology is the low-density housing estate (103 plans of this kind were approved, that is, 19% of all plans and 39% of the total area). Low-density housing estates consist mainly of detached houses placed in a dispersed form. In Spain this model has a dual historical root. On the one hand it is true, as often noted, that this is an influence of the Anglo-Saxon suburban tradition. Nonetheless, it is noteworthy that

single-family housing has historically been the dominant model in rural areas in Catalonia. In any case, it was not until the 1960s when the socialisation of summer holidays and the arrival of European tourism led to the proliferation of mass low-density second-home housing estates on the coast. Thus, many developers, especially from Barcelona, saw a profitable business in this type of project, although in many cases at the cost of developing them illegally and selling plots without basic infrastructures (paving, water and lighting). As a result, after 1979 local administrations had to legalise many neighbourhoods through new zone development plans, a process that, given the insufficient financial capacity of both the town councils and the owners, often made it necessary to expand urbanised areas and sell new plots in order to pay for infrastructure investments.



In addition, from the second half of the 1980s the demand for second homes picked up again and a new type of project developed with a post-modern profile: very-low-density

housing estates and golf resorts, which were presented as a higher quality alternative to the traditional residential model of "sun and sea". These new projects met the legal standards and often exhibited high urban quality but their location criteria and ratios of land consumption were absolutely unsustainable (for example, Residencial Torre Mirona golf club, 91 ha; Golf Girona, 52 ha). As a result, low-density housing estates were the first typology in terms of area developed.

Finally, it should be noted that, beyond the phenomenon of leisure estates, from the 1990s on, low-density housing estates for primary residence developed en masse in small municipalities on the periphery of cities for commuters. This new wave of plans was closely linked to oversized projects as well as practices such as designing or modifying local development frameworks "on demand".

The third typology is industrial and business parks (171 plans of this kind were approved, that is, 33% of all plans and 34% of the total area). Industrial and business parks are projects aimed at production, storage and service activities. Until the 1970s, companies were set up spontaneously and had serious deficiencies in infrastructure. With the advent of democracy the *Generalitat* encouraged the development of large-scale industrial parks, especially in small towns on the periphery of large cities.

Growth of the tertiary sector and globalisation of the economy meant, since the 1990s, a shift in the concept of the industrial estate consisting of factories and workshops, and a progressive transition to a more complex type in which industrial plants, offices and logistics shared a common space or were set up in specialised estates. Indeed, new commercial and leisure activities (malls, hypermarkets, multiplex cinemas, fast food

restaurants) colonised the sites located at motorway entrances and created new suburban centres. Examples of this are Espai Gironès, a new shopping mall of 40,000 m<sup>2</sup> located on the outskirts of Girona with a target population of 400,000 people, and Girona-Costa Brava Airport, which, with the expansion of low-cost flights, has become Barcelona's second airport and generated major urban dynamics around it (mainly logistics and offices). A parallel phenomenon is the commercial strip, that is, corridors of service activities (car dealerships, furniture stores, hotels) alongside highways due to the concatenation of zone plans without any territorial coordination guideline.



Figure 8. Mall located beside a motorway

Many of these new areas of economic activity are perhaps the best local laboratories of global trends. Firstly, because of the international origin of developers and capital. Secondly, because of the flexible architectural solutions, modular buildings and themed areas, functional in a time of rapidly changing economic needs and consumption trends. Finally, because of their locational patterns, that is, the new polarities and boundary

lines of road networks. A new liquid landscape emerges and the cultural and aesthetic values forged in the region itself tend to succumb to globally shared standards.

#### **4. Conclusion**

This study is a significant example of the major transformations that have taken place in urban development in Catalonia and Spain over the past three decades. In the Girona districts in particular, the magnitude and intensity of the process was striking. A total of 522 zone development plans were approved and nearly 6,000 ha urbanised.

However, the process had a dual reality. The growth of core cities in urban areas starting from compact layouts alternated with the appearance of new suburban expansion made up of low-density residential areas, industrial parks and shopping centres, specialised and segregated from the urban grid. Along the coast the process was marked by the hyperspecialisation of numerous municipalities in second-home housing estates that often were dispersed and/or oversized.

Hence the outcome of this period was ambivalent in planning terms. On the one hand, a new development practice of compliance with the law was imposed and many of the ills of the development at all costs period were corrected. Nonetheless, the model was altered in four basic ways. Firstly, by the inertia of the physical characteristics of the previous period. Secondly, because many local plans became oversized. Thirdly, as a result of new strategies aimed at modifying plans according to the individual needs of developers. Finally, because the regional government did not deploy land use guidelines at the regional level. Thus, this new phase of market deregulation, acceleration of economic change and urban sprawl spawned a new crop of expansion plans and more

flexibility in managing them to accommodate just-in-time operations. The explanation lies in the management by many town councils, trapped in urban growth as the main tool for development, sometimes with tacit public approval, and in the reluctance of regional authorities to establish coordination guidelines for local frameworks.

This was the development culture until 2005, when after the first change of political party in power in the Catalan government, a new set of regional land use plans was implemented, with growth rates and land use guidelines that local plans were required to observe. This marked a new stage in the field of urban planning, but the results fall mainly outside the study period. The recession that hit in 2007 and 2008 put an end to this period and invites us to thoughtful reflection on our urbanisation model.

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