

## Urban space and its transformation in two Spanish Mediterranean cities: Alicante and Murcia

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### 1 ABSTRACT

During last two decades all Spanish Mediterranean cities have increased their surface and, in consequence, their urban public space is nowadays greater than it was before. Not only the amount of public space has increased, but also the role that public space has now is not anymore the same, especially in middle urban areas. Alicante and Murcia are good examples of the group of cities where the population growth and sprawl impact have had an important role in the transformation of the cities over the last two decades. The aim of this paper is to study, in those two cities, how public space has been transformed in the existing city and designed in new areas.

Four important processes can be underlined considering the use and features of urban public space: firstly, city centre public spaces have maintained their relevant use but their design have been updated to currently activities; secondly, the implementation of new public transport –light metro or tramway- has renewed public space in the city centre and in the periphery; thirdly, the change of population habits that include activities that previously took place in public urban spaces and recently have been moved to private places related to shopping centres; and fourthly, the lack of quality public spaces in new suburbs based on low density houses and where all means of transport are private cars.

### 2 EVOLUTION OF LAND CONSUMPTION IN SPAIN

According to the report published by the Observatory on Sustainability in Spain, “Changes in Land Use in Spain, Implications for Sustainability”, the amount of land transformation over the past 20 years in Spain is equivalent to more than a third of all land transformation that has occurred over the country’s entire history. Artificial surface has increased more in Spain (along with Ireland and Portugal) than anywhere else in Europe.

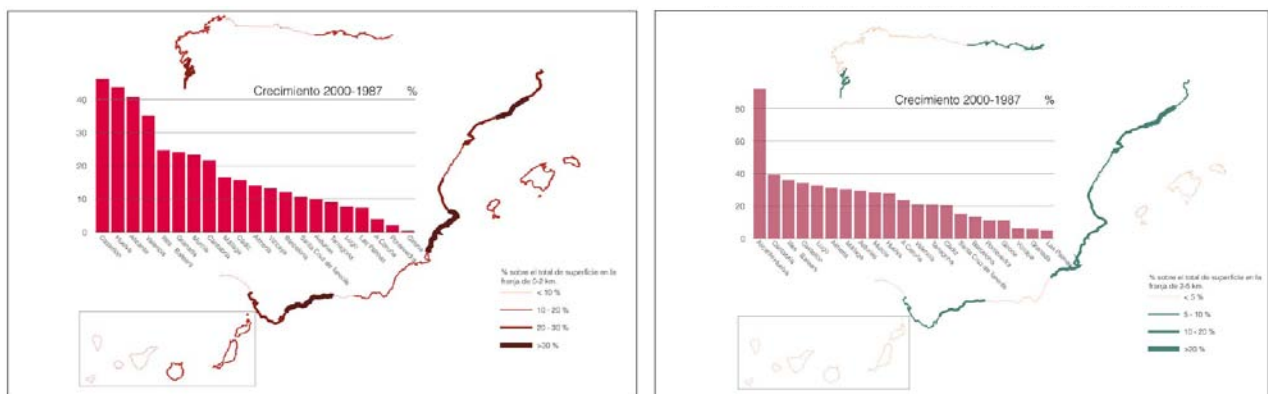


Fig.1 “Growing artificial surface coast map between 1987 and 2000”

Source: OBSERVATORIO DE LA SOSTENIBILIDAD EN ESPAÑA.

Clearly, this change in land use has not occurred evenly across the country; the metropolitan area of Madrid and the coastal regions of the Mediterranean are where the highest rates of transformation have been recorded.

It is the Region of Valencia (this region includes the province of Alicante) that has experienced the greatest increase in artificial surface at 50%. The processes of intensive coastal urbanisation are largely determined

by the “littoralisation” of urban development in Spain. As tourism is such a driving force behind the economy in many areas of eastern Spain, population movement has arisen for two specific reasons. Firstly, people are attracted by the availability of work in the construction and tourism sectors, and secondly others (particularly retired people) migrate from other EU countries, attracted by the favourable climate and the multiple leisure and recreational possibilities that the coast has to offer.

Of the three provinces in the Region of Valencia, Castellón, Valencia and Alicante, the latter has recorded the highest levels of coastal land transformation. According to the data, for the strip of land between 0 and 2 kilometres from the coast, Alicante is the third Spanish province (behind Castellón and Huelva) with the highest levels of artificial land transformation, but is the first province in the country for the strip from 2 to 5 kilometres, recording an increase of 92.2%, with all other Spanish provinces (including those on the Mediterranean and Atlantic coasts, and the islands) below 40%. Alicante province, therefore, has the highest level of artificial coastal land transformation, not just in the Region of Valencia but in the whole of Spain.

The strong growth of both the continuous and particularly the discontinuous urban fabric has produced the greatest impact on the coastline of Alicante province, causing a major environmental burden in terms of resource consumption, emissions and waste. Furthermore, in recent decades these processes of intensive urbanisation along the coastline have transformed the landscape to a high degree both on the coast itself and in immediately adjacent areas.

The increase of artificial land use carried out in the province of Murcia is similar to the region of Valencia. In fact between 1987 and 2000 the expansion of artificial surfaces is quantified in 14.004 ha. which is represents the 62% of the artificial surface in 1987. This increase is the highest percentage in relative terms in Spain.

### 3 LAND CHANGES IN THE URBAN AREAS OF ALICANTE AND MURCIA

Municipality	Artificial surface 1990 (hectares)	Artificial surface 2006 (hectares)	Surface Increase 1990-2006	Population in 1990 (inhabitants)	Population in 2006 (inhabitants)	Population Increase 1990-2006
Alicante	3198,18	5202,32	63%	267485	322431	21%
Murcia	4132,60	4726,80	14%	328100	416996	27%

Table 1: “Surface and Population Increase between 1990 and 2006”.  
Source: INE and Corine Land Cover.

#### 3.1 The case of Alicante

Between 1987 and 2006 in Alicante and its area of influence, there has been an important occupation of soil, in continuity with the central city itself, as in other coastal towns and inland.



Fig.2: Changes in the use of land in Alicante and its surroundings between 1977 and 2006.

Source: IGN, Corine Land Cover and Google Earth.

With regard to the growth in continuity with existing urban tissue and with regard to residential use, it is possible to highlight three developments with different characteristics. The first one, in the city of Alicante, corresponding to the consolidation of the spaces located between Gran Via and via Park - two concentric urban ring roads-; in this area, especially in the North and West, a new residential space with the current urban facilities has offered. The second development is the major occupation of the coast on the beach of San Juan, where all the surface close to the coast that had not been occupied to date has been transformed; if the first coastal strip had a use based on the second summer residence, new occupations have kept it combining with the offer of residence housing and other related leisure activities. The residential typology in this area has been simultaneously the low density and medium density spaces similar to the of the ring roads of Alicante. Finally, the third growth based on the continuity of the existing urban fabric has been developed in San Juan and San Vicente del Raspeig which have offered alternative to the central city market residences; in both cases the residential typology most repeated has been the urbanization of low density –detached and semidetached houses - with the corresponding huge occupation of land.

In addition to these growths in continuity with existing populations, there is a considerable discontinuous residential development, specifically, occupying the existing area between the aforementioned towns of San Juan and San Vicente del Raspeig. This process of occupation of land has not been exclusively residential and it is worth noting other uses which have shared the territorial transformations of this area.

With regard to the incorporation of new institutional or facilities spaces it is worth stressing the surface occupation corresponding to the enlargements of the University of Alicante during the study period, three times the previous surface occupied for the purpose.

The increase in land for new industrial spaces has been also significant, specifically the new surfaces located next to the A-3 motorway in direction to Madrid to South and West. On the other hand, extensions of communications as the airport and port infrastructures have had a certain influence in shaping the new resulting territory.

Finally a special mention deserves the introduction of the two new golf courses in San Juan Beach - town of Alicante- and Campello related to real estate operations, plus a third, without associated residential area in the intermediate space between Alicante and Elche.

### 3.2 The case of Murcia

In the urban area of Murcia occurs a strong occupation of new land, both according to a growth in continuity with existing city and with a discontinuous nature near existing towns. The new developments are situated occupying the outside of the city, with the exception of the western edge where the A-30 Murcia motorway establishes a limit that does not vary in this period. Northward the free area between the urban occupation and the A-7 highway is clearly reduced; in the western area an important transformation of previous agricultural land –market garden- has been transformed in new residential areas following the existing rural roads; and to the South, the gap between the city and the South ring road is filled with new residential uses.



Fig. 3: Changes in the use of land in Murcia and its surroundings between 1977 and 2006.

Source: IGN, Land Cover and Google Earth.

Two broad categories that appear in this period can be set with respect to discontinuous low-density residential developments. On the one hand, housing developments of large dimension located some distance to the North of the city of Murcia - Molina de Segura and surroundings - and, on the other, new concentrations of houses that cover the whole previous agricultural spaces –market garden- that surrounds the city from Northwest South.

In addition to the above-mentioned increases, the most important territorial transformation of this urban area is produced along with the A-7 highway that runs through this area of from northeast to Southwest, a few kilometers from the city, becoming the new axis of the recent developments. Thus, this road axis - along with their connections - has crystallized as the backbone of a new linear city parallel to Murcia in which all new residential, tertiary, institutional and commercial activities have been developed.

From northeast to Southwest highlights certain areas of new occupation with a certain territorial specialization. The first remarkable activities group is formed by the occupations on both sides of the highway next to the first junction that connects with the city center from the North -D. Juan de Borbon Avenue-. On the north side of the highway -the new Condomina- have been placed a large tertiary, residential and commercial areas as well as the new football stadium. On the other side of the motorway, in the direction towards the city, there is a sequence of spaces of different uses in which combined commercial spaces - including the establishment of the multinational Ikea - along with residential estates of low density and interstitial spaces of the previous agricultural surface- market garden-.

The second great new activities space located in the A-7 motorway corresponds to the Strip between the following two junctions that provide accesses to the city centre of Murcia. This area features various residential occupations where there are areas of higher density than the urbanization of townhouses and shape a more urban space taking advantage of continuity with the central city. Also in this area there is an important public facility corresponding to the campus of the University of Murcia, a new occupation that follows the patterns of Alicante.

The third and final large surface along the highway is situated next to the population of La Ñora; it has a residential character of low density in addition to include another commercial centre specialized in leading brands of clothing and accessories -La Noria Outlet- and some distance inland from the city, the facilities of the Private Catholic University of San Antonio de Murcia.

In connection with the occupation over industrial land, should be noted that while there are small industrial developments close to the city of Murcia, next to populations of Alcantarilla -to the West- and Molina de Segura -in the North- a significant growth of this type of surface has been developed in the mentioned period.

Another new characteristic territorial activity of this period is the appearance of golf courses which also emerges in the vicinity to the city of Murcia: one in Molina de Segura, some distance north, and other three located halfway between the city and the coast, in South direction.

#### **4 NEW URBAN SPACE IN THE CITIES OF ALICANTE AND MURCIA**

Recent land transformation has changed not only the dimension and land uses in these cities but also the distribution and uses of public space. The traditional and compact cities like were Alicante and Murcia until recent days have been transformed in more complex urban areas that have new public spaces not only situated in the traditional city.

It is possible to identify nowadays, at least, four different types of urban spaces: the traditional city centre public spaces that have maintained their relevant use but their design have been updated to currently activities; secondly, the transformation developed by the implementation of new public transport –light metro or tramway- that has renewed public space in the city centre and in the periphery; thirdly, the change of population habits that include activities that previously took place in public urban spaces and recently have been moved to private places related to shopping centres or malls; and fourthly, the poor quality and quantity of public spaces in new suburbs based on low density houses and where all means of transport are private cars and free space is mainly private.

#### 4.1 City Centre public spaces

The first difference in the use of public space between Alicante and Murcia is related to the role of the city centre in both cities. On the one hand, Alicante city centre has had an important decrease of population and activity (commercial and tertiary) during the 80s and 90s, however in the last decades both populations and activity has change this dynamic and nowadays the city centre has recovered the functional and representative importance that it had. It is probably one exception to this process situated in the coastal strip of the city that has always had an important role in the use of public space. On the other hand, Murcia city centre has always been the core space of the city and the use of public space has been quite intense. Two reasons help to maintain the importance of the city centre: the fact that this area is also the geometric centre of the continuous nowadays urban area and this amount of public facilities and institutional buildings that are situated in this part of the city. It is worth mentioning that Murcia is the capital of the Region of Murcia meanwhile the capital of the region of Valencia is Valencia and Alicante is the second city in the region. This administrative circumstance offers Murcia a considerable attractiveness for public and private institutions to have their head offices.

If we had to choose a representative urban renewal project in the city centre of these two cities, probably the best example would be the Cardenal Belluga square by Rafael Moneo. The objective of this project was to reconsider the urban space and the vacant spaces around it. A new building for the town hall administration was built and the urban space has been reorganized. Not only the pavement treatment has been conceived for a pedestrian user-friendly public space and the best perception of surrounding buildings but also the different functions have been reorganized: a strip for outside cafeterias opposite the main historic buildings.



Fig. 4: The Cathedral of Murcia and its surroundings. Cardenal Belluga Square  
Source: Goolzoom.

#### 4.2 New public spaces related to new transport infrastructures

In both cities, during the last decade an important new strategy has been developed concerning public transport within the urban area: the implementation of a new tramway or light metro linking the city centre and the suburbs or recent developed areas.



Fig. 5: The Tramway of Murcia and Alicante.

Both new lines connect the city centre with new residential areas and important public facilities. It is possible to distinguish the central city route and the suburbs. In the central city two different options have been adopted: in Alicante the tramway has been implemented underground the main squares and boulevards which has offered more of space for pedestrians in these spaces meanwhile in Murcia the tramway line covers the surface of streets and squares maintaining the importance of motorized traffic transit. In the suburbs, although both cases link the centre with urban areas in the periphery there are some differences in the characteristics of their route. The similarities are in both cases the access to important public facilities like Hospitals and Universities –one university in Alicante and two universities in Murcia-. The main difference is that in Alicante the new line in addition to offer accessibility to the suburbs connects another city which is San Vicente del Raspeig.

Apart from the aforementioned functional differences, another important distinction is the treatment that public space has had in the implementation of the route in both cities. On our point of view in Alicante the intervention has been more integrated and has tied to consider the transformation of public. An example of this new treatment of public space integrating the tramway line is the boulevard del Pla where the implementation of the railways has allowed to develop a linear garden.



Fig. 6: “The Tramway of Alicante. Boulevard del Pla.”



Fig. 7: “The Tramway of Alicante. Gastón Castelló Square.”

### 4.3 Private spaces vs public spaces in citizen’s habits

Another important aspect in the transformation of the use of public spaces has been the introduction of an important number of new malls or shopping centres in both cities. Between 1998 and 2004 seven new shopping centres were built in Alicante and between 2000 and 2008 four new in Murcia. The influence of the shopping centres on public space is related to citizen’s habits as, to a certain extent, social activities that were held in urban public spaces are nowadays moved to these private spaces. But the most incredible aspect is how these private areas try to emulate urban public space.

Two examples of extreme design can be found in both cities: the shopping centre of Gran Vía in Alicante and the Outlet La Noria in Murcia. In both cases the design of facades and the private free space has been a copy of traditional Mediterranean squares and buildings –including, institutional buildings or churches- without any consideration to scale or truthfulness.



Fig. 8: Shopping Centre “La Noria” in Murcia.



Fig. 9: Shopping Centre “Gran Vía” in Alicante.

#### 4.4 The lack of public spaces in new suburbs

If the traditional Mediterranean city was characterized by the compactness and the use of a compact and dense city, the new reality is quite different. An important amount of land has been occupied by low density suburbs where connections with the city, working places or any other activity –including visiting shopping centres- are exclusively consigned to private motorcars. The figures speak for themselves: the discontinuous urban fabric is nearly double in all areas and in some cases the surface is four times the previous in 1990.

	Discontinuous urban fabric	Discontinuous urban fabric	Discontinuous urban fabric
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	surface in 1990 (square metres)	surface in 2006 (square metres)	surface Increase 1990-2006
Alicante	6.721.844,30	14.286.751,20	113%
Urban Area of Alicante	39.409.106,80	80.393.005,70	204%
Murcia	11.760.099,30	22.629.317,50	92%
Urban Area of Murcia	21.360.566,54	37.740.434,42	72%

Table 2: "Discontinuous urban fabric surface in Alicante and Murcia and its Urban Area between 1990 and 2006".

Source: Corine Land Cover.

The influence of the new city on public spaces is quite important in we consider two circumstances: on the one hand these type of urbanizations do not have any public space as the inhabitants choose these houses because they have their own private free space in the interior of their plot and, on the other hand because less citizens need to use public space in the central city or in nearby neighborhoods.



Fig. 10: Discontinuous urban fabric surface in Alicante and Murcia outskirts.

## 5 CONCLUSION

The use of public spaces is related to population's habits, the urban activity and to the accessibility of these public spaces. The four types of public spaces that have been studied in both cities, Alicante and Murcia, reveal that public space has change in the last two decades as the old compact and traditional cities are now extended urban areas with new functions and uses.

The traditional urban space has maintained its relevant use in the central city but its design has been updated to currently activities and renewed. The extension of the city has led to the implementation of new transport systems as tramways or light metro and public space has been integrated in the new infrastructure. The impact of shopping centres has affected not only to mobility but also to the use of urban space. The most amazing case is the replacement of traditional urban spaces by new private areas decorated as public spaces, reproducing traditional public spaces with copies of old buildings, churches or traditional squares. And, the last case of study, new suburban low density areas show how in these parts of the city a the poor quality and quantity of public spaces have been consolidated.

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