Public Space in Barcelona (1992-2017) - Evolution and Case Studies

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Abstract. The construction of the public space has become in the last decades something so important and fundamental in the architecture of the cities, that requires a specific discipline and a concrete study that evaluates the characteristics and actions on it. Not already from an urbanistic perspective but from its own design and constructive perspective, with its character as a place for everyone and for everything, must gather a series of elements that are unique to this space. Barcelona is one of the densest cities in the world that, since the end of the s. XX until our days, tries to solve the public space with a design of quality and optimum. The shortage of public space, which also hosts more than eight million tourists each year, makes it necessary to propose a type of meticulous intervention in order to accommodate all types of users and activities. From the first Universal Exhibition of 1888 through 1929 to the 1992 Olympics as the most important stimulus for this renewal of urban space, Barcelona has been rethinking and evolving in the modus operandi in terms of its urban space. From our professional experience as architects both in the municipal, private and university spheres, we believe that it is our responsibility to confer the public space, that is to say, the design of the urban infrastructure with the attributes necessary to consolidate it in a space Suitable for all without exception and as a place of expression of citizenship. Through the projects of public space developed in our office we will analyze this change of procedure in the construction of squares, parks and other spaces in the city of Barcelona.

1. Introduction

The exterior architecture, where the building ends, where the outside begins and there is contact with everything else, that outer space that is technically resolved or constructed with walls, pavements, vegetation, enclosures and through which networks of service through. A whole underground world of sewage, supplies, communication, etc.

This exterior architecture is becoming more and more important, being the cities the destiny of the majority of the population. The normally degraded natural space, in the limits and voids devoid of use of the city, gives way to the public space properly ordered, urbanized and designed to accommodate the increasingly complex network of requirements and elements that are necessary.

This space definitely confers the appearance or the character of the cities sometimes in a surprising way. For example, in Venice canals are the streets and therefore a fundamental part of their public space, and Central Park of NY with its natural character is one of the most important icons of the American "brand". Other times, a river or beach (San Sebastián) or the monuments or vestiges of other times (Roman forums) constitute the authentic public space recognizable of the city. Las Vegas “Strip”, a city-shaped artery, masterfully analyzed by Venturi, in his "Learning from Vegas", it was a new language in
architecture with its symbols and luminous signs, it becomes the recognizable image from the city. It is true that its historical significance has changed and the use of that space has changed in certain societies and has often become obsolete in front of other leisure proposals. In cities like Miami with very hot and humid temperatures, and with a much exaggerated development of the private vehicle and very little of public transport, the public space, except for a narrow stretch of beach, does not in use.

The route of the vehicles is more segregated from the pedestrian than the European cities that can get to share with more or less success the same space. Thus, the human relationship, which is a specific feature of the use of public space, only occurs in places built for trade, restoration, etc. Far from urban roads. This is important since in order to understand the construction and development of the public space we must fine tune its characteristics and uses, though that depends that the street or avenue become an useful public space. A beautiful forest may not be public space but it meets minimum conditions of use and security for it to be. The same can be said of a port area, agrarian or an urban fabric of streets. In this performance premise is the key to the design and construction of public space.

Figure 1. Chronological axis of the main actions of the First Urban Renovation of Barcelona (1888-2017)
2. Historical-urban context
We leave behind the interventions of modernization and sanitation of the medieval cities in terms of the demolition of bastions and piers, and the construction of outbuildings or boulevards by means of the "sventramento" or "didaramento" urban (Via Laietana) that was also executed in cities like Rome or Paris (Plan Haussmann). We are framed in post-Franco Barcelona, a historic period marked by the establishment of democracy and the exaltation of citizenship by openness and internationalization.

With the recovery of the democratic city councils of 1979 begins a process of urban renewal that will last well into 1986, with works prior to the upcoming Olympic event. In this first period of renovation of the public space, the city was transformed into 11.17% of its public spaces, increasing considerably in the second period of renovation that goes from 1986 to 1995 with 34.72%. The third period of post-Olympic renovation will cover the turn of the century to the present.

Figure 2. Outline the four Olympic areas

The main characteristics of the type of intervention in the first period of urban renewal consisted in articulating the voids and creating a communicated urban structure. In the middle of the eighties a movement of significance of the public space began by means of the use of urban furniture of design, of “monumentalization” by means of sculptural elements and of singularity by means of the creation of new topographies.

This excess of design gave rise to the denomination of "model Barcelona", an internationalized mark and characteristic of this first and incipient phase of renovation. A peculiarity of this pre-Olympic period is the countless sculptures and new monuments for each intervention. With these icons was characterizing each of the four main areas intended to host the Olympic event. Examples are the
sculptures of Miró in the Escorxador Park, Tàpies, Lichtenstein and the sculpture of "El Cap de Barcelona", Gehry with the famous "Peix" Joan Brossa with the "Visual Poem", the sculpture "Topos" of Chillida, the "Mistos" by Claes Oldenburg and "La Gamba" by Mariscal. In Barcelona the public space was designed from the density and the exhaustive use, also from the diversity and the universality that is the use for all.

As for the second period, it is necessary to emphasize the necessity of connectivity through the creation of new infrastructures and the elaboration of routes that relate these new singular urban spaces. If the squares of the eighties were absent from the urban fabric, connectivity, apart from historical ones, with the Olympics and municipal decentralization and the intelligent redevelopment of the periphery, the immediate contours of the city became more liveable.

A decade later, with the new century, the city required the recovery of pedestrian space. The work of Salvador Rueda at the head of "Barcelona ecology" and the layout of the network of buses in grid and the possible implementation of “Super-illes” pose the challenge of mobility as one of the most important aspects of the philosophy of development of the future Urban space in Barcelona.

The implantation of the bicycle and the connection by tram would finish the new mobility led by agency of urban ecology in his fight against the private vehicle as main means of transport. Independently of this fought and discussed vision of Barcelona, the execution of the new public space from the controversial project of the Glòries Park / Square until the definitive recovery of the maritime front and even the failed contest of the so-called “Portes de Collserola”, debate at all scales.

In the last stage of the development of the city where the previous government team 2011-2015 put the emphasis on the transformation of the city so that it was a paradigmatic example of what is called “Smart cities”, and it is undoubtedly that Barcelona is very well positioned among other reasons, for the biannual celebration of the Mobile World Congress, the largest communication technology event in the world, makes this approach be up to date and that urban space certainly would be transformed in few years due to the unstoppable boom of new technologies.

But the inevitability of this development makes it a tool or a conditioner, but not an objective in itself. That is why the return to the neighbourhood that it has to cover or can remedy that small area, place or passage public for its closest citizens has lately become a good way to make a city without specific strangeness or bragging.

At the design stage, at present, the precept of consolidating of making the small public space close to housing and of a local and neighbourhood character is more versatile and useful. This new way of acting in the public space is called as "micro developments", urban acupuncture based on minimum performances. A change of pavement, an improvement of the habitability of the space through urban furniture, a provision of games equipment for a sterile void, the regularization and management of existing vegetation, and so on. They are minimalist interventions but they transform the space in a substantial way.

These new spaces adapted to the XXI century lend themselves to adopting different social activities. They are areas of cultural exchange that lead to the creation of “urban orchard”, and an enormous number of uses that allow the versatility of space. This flexibility is not fortuitous, arises from the analysis of the pre-existence and the direct population that will make use of the place.
Figure 3. Chronological axis of the main actions of the Second Urban Renewal of Barcelona (1990-2017)

3. Case studies: Districte de Gràcia and Districte de Sant Martí

To illustrate the evolutionary process of the formalization of the public space in Barcelona we will focus on the exposition of the first two urban experiences to that effect.

The first case includes the interventions of the District of Sant Martí, focused in the old Poble Nou. It housed factory structures from the late eighteenth and mid nineteenth century, that were able to coexist with the creation of the Districte 22 @ based on innovation, creativity and technological design. Together with the last macro-urban operation of the maritime front through Forum (2004), it is an area that has tried to update its industrial character and adapt to the requirements of the city of s. XXI. The examples that follow are interventions ranging from 1988 to 1996, one of the authors of which worked as architect of a DTE, and from 1996 to 2001, responsible for urban projects in the district of Gràcia, and are based on the first case in the creation of an extra-radio public space of the pre-Olympic zone.

The second case is the District of Gràcia, with a different urban fabric, very dense and compact. The streets are narrow and the urban voids are small, in fact, the squares do not exceed the surface of the
“xamfrans” of Example. These urban interventions were carried out in the form of acupuncture, which provides for a multitude of activities in small spaces.

![Figure 4](image-url). Location of some activities of the office in urban spaces and green areas. The numbering corresponds to the projects indicated in the chronological axis in blue colour.

### 3.1. Districte de Gràcia

#### 3.1.1. Frank Square (1998)

Public space that emerges from an urban void created by the discontinuity of a street that never opened and represents a type of recurring performance in very dense, ancient fabrics that initially were not predetermined for civic use. The space surrounded by blind walls and completely residual becomes a small square full of symbolism, with a very little budget, its cost did not surpass € 25,000 in 1998.

The square was configured by manipulating the vertical surfaces of the walls and the horizontal ones, and creating a new access to the Center Artesà Tradicionarius (CAT). The proposal to dedicate the place to Anna Frank suggested the idea of an austere, somewhat hard, but at the same time serene and delicate space. The verticality of the blind walls exposed by naked brick and the use of oxidized, broken or recycled materials, such as electro welded meshes on brick, benches made with huge IPN profiles, or flattened in horizontal strips, confer a special atmosphere to the small space. The tree tops were made of crushed glass, and the gravy pavement with prefabricated concrete pieces with corten steel joints, one of which eventually became the monolith. All this created an atmosphere of special emotion and intensity that refers to the sad remembrance of concentration camps, in contrast to the delicate figurative sculpture of the adolescent Anna Frank on the marquee, by Sara Pons, as well as the mural painted by
The Massana school, now disappeared, which culminated a unique space. The work was selected for the FAD awards of 1998 and finalist in the awards Decade of 2008.

Figure 5. Location of the most representative performances of the City of Barcelona in the two periods of Urban Renewal

3.1.2. Urbanitzation of Pla de Salmerón (1996)
This intervention consisted in the creation of a new public space, the Pla de Nicolás Salmerón, as the gateway of the district at the beginning of the Gran de Gràcia Street, and connecting it with the “Jardinets” of Salvador Espriu. It is a flat surface with different floors of tile, lawn and coloured agglomerate where they were placed benches of treated wood. To identify this gateway to the district were six masts with large flags containing each of the letters of the word Gràcia. The materials were asphalt coloured as the area at the end of the Passeig de Gràcia, and the spaces for the terraces of the bars were differentiated by wooden platforms to make the pavement more pleasant.

3.1.3. Jardines de la Plaza Salvador Espriu (1999)
In this large space was intended the connection with the Pla de Salmerón and the beginning of the Gran de Gràcia Street. The project contemplated the adaptation of the final space of the “Jardinets”, with the creation of two linear banks, the total renovation of the pavement, and a space for the realization of a participatory project with children of the District of Gràcia schools. It was done in part and the participation was a success that nevertheless did not materialize.
3.1.4. Narcis Oller Square
End of the route of two streets Seneca, Minerva converted into pedestrian with symbolic references of persecuted minorities, with metal profiles embedded in the pavement, the square with a "mantle" of water. Slides on the granite pavement receives with its whisper to the pedestrians.

3.1.5. Squares and connectivity of Morell Square (2017)
Morell Street represents a cut in the urban fabric of the District of Gracia. It is an urban void of difficult resolution since at its lower and upper levels there is a very steep slope that in its time was solved with stairs. The commission of rehabilitation of this cut involved the rethinking of its accessibility and habitability. In order to achieve these requirements, a lift with a gangway was added, the adaptation of the stairs to the new regulations and the inclusion of children's play equipment. The play areas are small playgrounds and on the slopes that accompany the stairs are situated slides that give meaning to the slopes and give space a playful sense.

The street also configures a "cul de sac", which is resolved with a colourful pavement just like the rest of the stairs. As for its construction, the difficulty of reforming a stairway existing between two retaining walls of land, which is solved with a box of stairs and a hearth armed with the layout of the new profile, is raised. Materials such as wood and rubber are used to give a cosy character. Vegetable slopes and creepers accompany the staircase and the proposed metallic walkway. Using the same pavement format, in two different colours, new drawings are configured on the pavement.

Figure 6. Districts of Barcelona: 1 Ciutat Vella; 2 Eixample; 3 Sants-Montjuïc; 4 Les Corts; 5 Sarrià-Sant Gervasi; 6 Gràcia; 7 Horta-Guinardó; 8 Nou Barris; 9 Sant Andreu; 10 Sant Martí.
3.2. Districte de Sant Martí.
Project and rehabilitation of Victòria Kent Square (1996-2017)

The initial project of the square solved the existence of an urban void of considerable dimensions at the intersection of Bac de Roda and Concili de Trento streets, in which there was a large parking-scraping in the interior of the block. Right in front of a school, where students access.

This led to the development of a project designed as a new topography, taking advantage of a part of the land that was extracted from the area of Diagonal Mar. The pavement is a continuous carpet of grass and concrete, with yellow spots that form different areas of Play children or rest. Like a winding tapestry, for the first time a mixed piece of concrete with green was used, to have a draining floor.

In 2016, the office was commissioned to rehabilitate the square, its exhaustive use of tree growth and poor maintenance spoiled the green continuity. The project brings together aspects that reveal the new project and constructive dynamics in Barcelona's public space, such as the conservation of the artificial topography of the original project and even the reuse of the pavement pieces. These pieces of 50x50x8 with holes that let green grow are more typical of climates more towards the north of Europe, the heat asphyxia to the green and the irrigation becomes essential with a water expense important, the same experience but with more success is moved to the Modernidad Square.

At the construction level, an intervention is undertaken that uses only two materials, the steel cut and the pavement of prefabricated cobble. The cobblestone has a linear oriented rig that includes zones of chromatic degradation. As for the corten, this will configure all the corners and beds of the square. For the lower area of the square, intended for parking, it is proposed to reuse the piece of pavement of the original project, implementing it with a special piece that levels the surface replacing the green of difficult maintenance in the southern climate of Barcelona. The play area for children has a synthetic rubber material that prevents knocks but also offers a chromatic intensity that enriches the space.

4. Conclusions

It is clear that the public space by its own definition is changing, by the habits and customs of the inhabitants that are modified over time. The requirements to be met according to the needs of the area or Neighbourhood, technical solutions that require a space of these characteristics, and why not and no less important the sense of belonging or not by citizenship, a difficult process in southern countries and perhaps more settled in the Nordic, where the citizen perceives it as his own and takes care of it as such.

In any case, the universal use of this space obliges architects, designers of these spaces, an intense study of the materials and their different elements, whether they are play, rest, vegetables, trees and, of course, paving, lighting, etc.

In fact, cities have become a complex artificial ecosystem specific and its design and maintenance is increasingly complex. In turn, architects have to be very cautious when intervening, to avoid that our accent or own footprint, is perceived very subtly and does not distort the continuity of public space. Let this intervention be the sum of all others, creating a palimpsest that converts that small or large space into a piece of the city recognizable and capable of being linked to the recognizable identity of the city.

At other times, the absence of character or of any type of identification can give rise to completely different but well-resolved interventions that can create a school or identify a new paradigm of intervention. It is the case to our understanding and in an exemplary way, the performances of the Plaza de Sants de Piñón, Viaplana, since at the time of its design and construction, was defining the new Barcelona and somehow this square new agenda of the pattern public space design.

Through this square, one could read the renovation of the whole city, the "style" Barcelona. It is true that many other spaces of author flourished that perhaps distorted the reading, but in perspective, the abstract design of that place became a language that many felt very close and proper to the successful and recognized construction of the urban space of Barcelona.

The unbridled growth of cities in the late twentieth and early twenty-first century, these developed almost out of nowhere, requires very rapid steps for those responsible for public design, for urban centers that lack many of the romantic attributes of old Cities, although they do not have the historical conditions.
or vestiges, nor can they present their own identity if the public space is not designed taking into account the requirements described above.

The construction of this space has become in the last decades something so important and fundamental in the architecture of the cities, that requires a specific discipline and a concrete study that evaluates the characteristics and actions on him. It should be studied from different points of view, urban planning, design and construction, but also from its social aspect. Indisputably, projecting the public space, we think, it is the most social architectural activity that exists.

It is our professional responsibility to give the outer space the necessary attributes to consolidate it in a place that is suitable for all without exception, as a place of expression of citizenship, and revealing the new ecosystem and the identity of the city.

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