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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.

BACKGROUND			FIRST URBAN RENOVATION							
1888	1929	1960-1980	1980	1981-1982	1983	1984	1985	1986	1987	1989
Exposición Universal	Expo Internacional.	Construcción y reformas plaza de Lesseps (1960-2006).	Creación del servicio de proyectos urbanos	Recuperación de la playa de la Mar Bella, en Poblenou.	Monumento a Pablo Picasso, de Tàpies.	Inauguración de la plaza de la Palmera en la Verreda, con una escultura muro de Richard Serra.	Inauguran el monumento al doctor Robert en la plaza Tetuan.		Inauguración del Moll de la Fusta.	Los Reyes inauguran el Estadi Olímpic de Montjuïc.
Construcción Avenida Maria Cristina.	Via Laietana	Apertura Avinguda Catedral (1958)		Ordenación de la Barceloneta	Escultura Dona i Ocell, de Joan Miró.	Nueva división de la ciudad en diez distritos.	Inaugurado el parque de La España Industrial en Sants.		Avinguda meridiana	Inaugurado el nuevo Fossar de les Moreres.
Construcción de la Ciutadella		Plaza de las Glorias Catalanas (1963-1966).		Plaza de la Mercè	Inauguración de la plaza de los Paños Catalans en Sants.		Inaugurado el Fossar de la Pedrera con un museo dedicado a Lluís Companys.	Inaugurada la Via Júlia en Nou Barris.	Rambla Catalunya	Catálogos estandarizados de elementos urbanos
Palau Reial		Apertura de un tramo de la actual Ronda del Mig 1973		Santa Caterina, Sant Pere, Santa Maria i la Ribera	Inauguración parcial del parque del Escorçador.		Parque Les Planes (obra 1985-1986) Hospitallet.	Renovación Paseo Maragall	Parque de Ca n'Atràs-Can Soler (obra 1982-1987) Badalona.	1-Pista polideportiva municipal La Palmera. Rbla Prim 125. 1989
				Paseo Picasso	Torre Blanca-Mancunidad (obra 1983-1986) Sant Just, San Feliu, Sant Joan Despi		Parque El Castell de Castelldefels	Renovación Avinguda Cambó	Parque Besòs (obra 1985-1987)	
				Plaza de la Argentina	Pie del Funicular de Vallvidrera		Parque La Salut (1985-1987) Sant Feliu de Llobregat	Portal Angel	Parque El Molinet-Esperit Sant (obra 1986-1987) Santa Coloma.	
				Del Liceo al Seminario	Jardines de Villa Sicilia		Estació del Nord	Montjuïc i els Turons	Parque Central-Sant Vicenç (obra 1986-1987) Sant Vicenç dels Horts.	
				Jardines de Emilio Vendrell	Jardín de las Cotxeres de Sarrià		Parque Pegaso	Via Júlia	Parque Litoral Besòs (1986-1987) Sant Adrià de Besòs.	
				Plaza de Salvador Seguí	Plazas Sarrià i Sant Gervasi		Jardins del príncep de Girona	Rambra Brasil	Parque Torrellanca de Sant Cugat (1986-1987)	
				Jardín de Drassanes	Plaza de la Concordia		Jardins d'Olga Sacharoff	Puerto Maremagnum	Parque Santa Creu d'Olorda (obra 1986-1987) Badalona.	
				Plaza Lluçmajor, paseo Vallbausa, avenida Río de Janeiro y via Julia.	Monumento a Pau Casals		Plaza de la Merce	Parc Central de Nou Barris	32-Proyecto de Urbanización La Indiana: Calles d'Estrac (Barcelona). 1987-2016	
				Plaza del Marqués de Santa Anna	Ordenación del Carmelo		Rambra del Carmel	Pla de Vics y pla de areas de nova centralitat		
				Ordenación Hostalfrancs	Jardines de la Torre Grogas		Renovación Ciutat Vella	Plaza de Gracia		
				Plaza de España y Pasco Reina Maria Cristina	Crueta del Coll					
				Plaza de las Navas	Torre Baró					
				Plaça Reial	Fje viandantes Sant Andreu					
				Plaza Mercadal	Carretera de les Aigües					
				Plaza Mossèn Clapés	Torre-roja (obra 1983-1984) Viladecans					
				Plaza de l'iche						
				Parones Clot						
				Carrer Prim						
				Plaza de la Palmera						

CITY COUNCIL'S PROJECTS
METROPOLITAN AREA'S PROJECTS
NSA URBAN PROJECTS
NSA PUBLIC SPORTS PROJECTS

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.

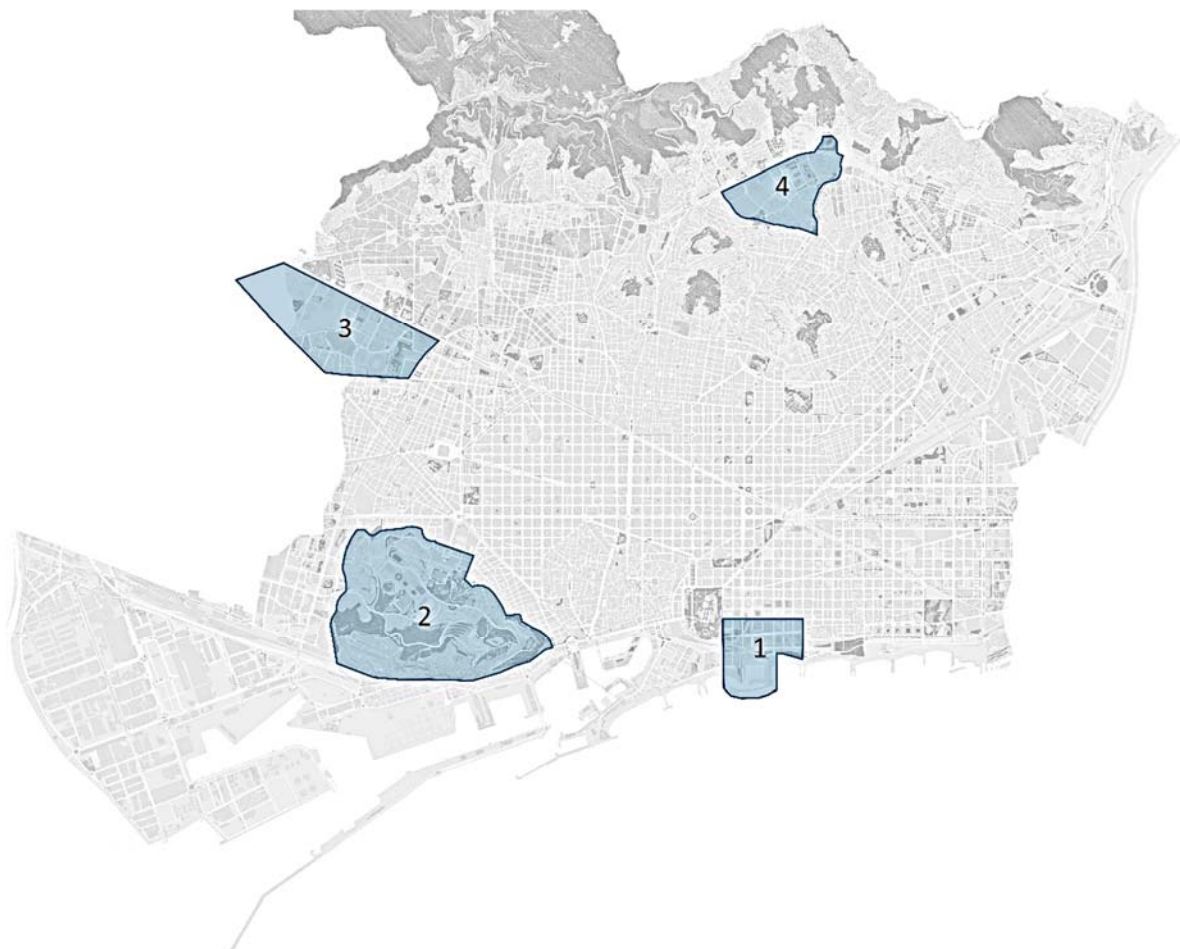


Figure 2. Outline the four Olympic areas

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.

SECOND URBAN RENOVATION						PRESENT				
1991	1992	1994	1996	1997	1998	1999	2000	2008-2010	2010-2017	
Inauguración del túnel de Vallvidrera.	Obras del Metro.	Se inaugura la Rambla de Mar.	Inauguración en la Rambla el monumento a la actriz Mary Santper, fallecida el 23 de septiembre de 1992.	7-Intervención en C/ Martínez de la Rosa, C/ Milà i Fontanals y C/ de l'Encarnació. 1996	Inauguran el monumento a Lluís Companys en el Arc de Triomf.	Ordenanza de usos	22@	27-Reforma del espacio interior y cerramiento del edificio Las Amèriques. C/Marià Cubi, C/Muntaner, C/L'Avenir y C/Santaldà. 2006	19-1ª Fase Campo Municipal de Softbol SANTIS-MONTJUÏC. Psg Olímpic 4. 2012	
Inauguración del monumento a Francesc Macià en la plaza Catalunya, obra de Josep Maria Subirachs.	Entra en funcionamiento el nudo viario de la Trinitat.		3-Proyecto de la Pl Victòria Kent. 1996	8-Urbanización de C/ Torrent de l'Olla. 1997 (a partir de proyecto previo)	Eduardo Chillida inaugura en el Macha su mural dedicado a la ciudad de Barcelona.	Parque Diagonal Mar	Entra en servicio el Trambaux.	18-Anteproyecto de rehabilitación de espacio público en Rambla Santa Mònica. CIUTAT VELLA. 2008	20-2ª Fase Campo Municipal de Softbol SANTIS-MONTJUÏC. Psg Olímpic 4. 2017	
Plan de espacios libres	Inauguración de el jardín de la plaza de las Glòries.		4-Anteproyecto Plaza Avda Diagonal-Rambla Prim. 1996*	9-Intervención en C/ Mare de Déu dels D'escamparis, C/ Tagament, C/ Torres, C/ Banyoles, C/ Igualada y C/ Camprodón. 1997	13-Urbanización de la C/ Verdi. 1998	Jardín Botánico	Inauguran el Fórum Universitat de les Cultures.	33-Proyecto de Urbanización de La Comisa. Sant Andreu de Llavaneres (Barcelona). 2009/2015	21-Obras de cerramiento de las instalaciones deportivas: Hípica, Béisbol, Softbol y Tenis de Montjuïc. CLM Marbella 2015	
2-Cerramiento equipamiento deportivo DX. C/Petu 215. 1991	Inauguración de la conexión del Moll de la Fusta con el de la Barceloneta, que incluye la escultura de Roy Lichtenstein.		5-Urbanización e implantación de recogida neumática en C/ Gran de Gràcia. 1996	10-Intervención en Pl Gato Pérez. 1997	14-Intervención en C/ Séneca, C/ Neptú, C/ Lluís Antúnez, C/ Minerva y Pl Narcís Oller. 1998	Paseo de la Barceloneta	Parc de Collserola	34-Proyecto de urbanización en casco histórico de Salt. Sall (Girona). 2009*	28-Parque de la Ginesta. Caldes d'Estrac (Barcelona). 2014*	
			6-Urbanización del Pla de Salmorçón. 1996	11-Intervención en C/ Joan Blanes, C/ Hruanquer y C/ Ramón y Cajal. 1997	15-Intervención en el Vinducto de Valcarlos. 1998	Paseo Joan de Borbó	Diagonal-Pere IV		29-Reurbanización del camino de Guisbà. 2015	
				12-Proyecto de la Pl Anna Frank. 1997		16-Urbanización de los Jardines de Pl Salvador Espriu. 1999			30-Hípica en Sant Andreu de la Barca. 2016	
									31-Posicionamiento, cerramiento y rieta en una finca de Teià. 2017	
									22-Anteproyecto de las gradas de las pistas de fútbol de Fort Pienc. 2016	
									23-Rehabilitación y reurbanización del Carrer Morell. 2016-2017	
									24-Rehabilitación Plaza Victòria Kent. 2016-2017	
									25-Urbanización y acondicionamiento del Passeig Putxet. 2014-2017	
									26-Reformas del Campo de Béisbol Pérez de Rozas en Montjuïc. 2017	



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.

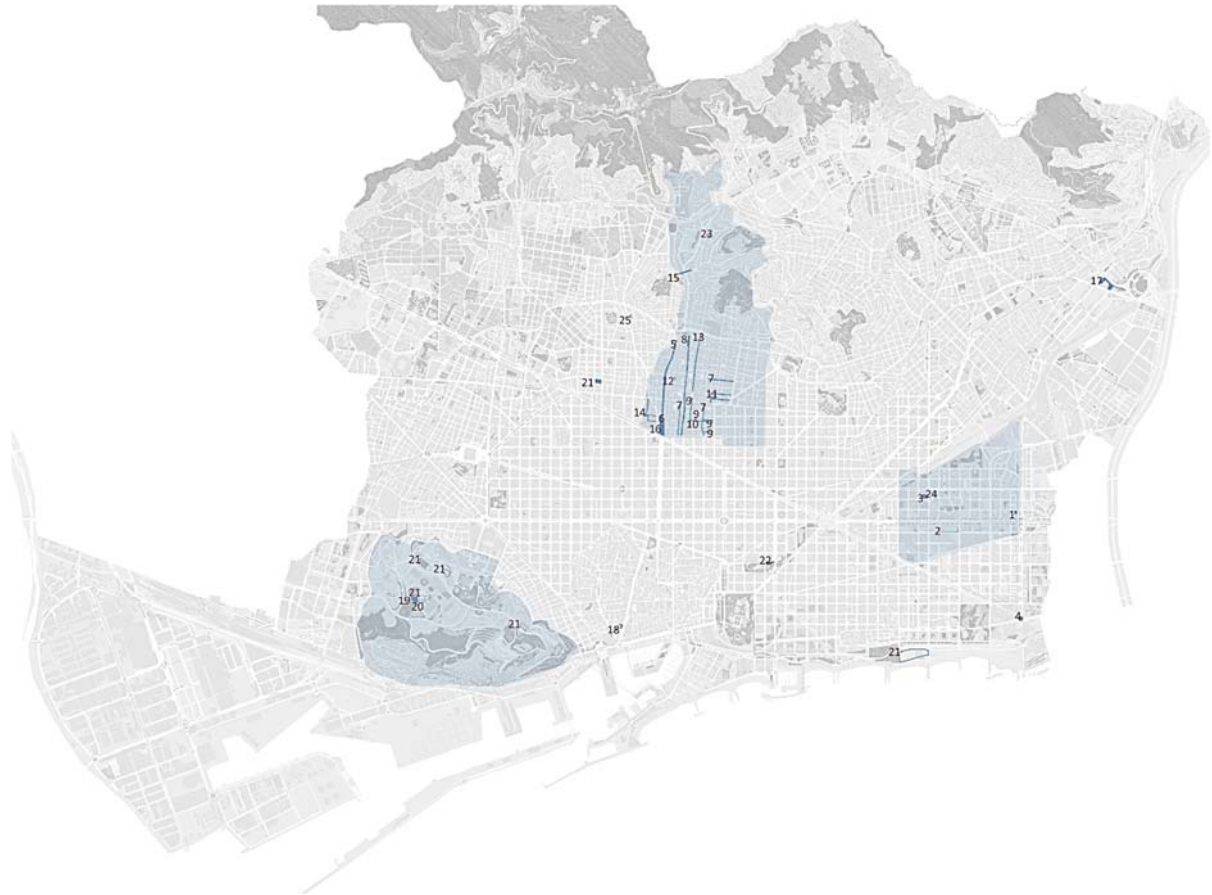


Figure 4. Location of some activities of the office in urban spaces and green areas. The numbering corresponds to the projects indicated in the chronological axis in blue colour.

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 Tradicionari (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 gravel 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.

CITY COUNCIL'S PROJECTS

- A1- Reconsideració de las vies ràpides en els cascs antics
- A2- El Moli de la Fusta
- A3- Plaça de la Mercè
- A4- Santa Caterina, Sant Pere, Santa Maria y la Ribera
- A5- Passeig Picasso
- A6- Palau del Carrer Montcada
- A7- Fossar de les Moreres
- A8- Plaça de l'Argenteria
- A9- El Raval
- A10- Jardins d'Emili Vendrell
- A11- Plaça de Salvador Seguí
- A12- Jardí de les Drassanes
- A13- Mansana Pelai-Bergara
- A14- Plaça Raial
- A15- Les Places de Gràcia
- A16- Avinguda Gaudí
- A17- Plaça del Marqués de Santa Anna
- A18- Hostafrancs
- A19- Plaça de l'Estació de Sants
- A20- Parc de l'Escoixador
- A21- Plaça d'Espanya i Passeig Reina Maria Cristina
- A22- Plaça de las Navas
- A23- Parc de l'Espanya Industrial
- A24- Nostra Senyora del Port
- A25- Carretera de les Aigües
- A26- Peu del Funicular de Vallvidrera
- A27- Jardins de Villa Sicilia
- A28- Jardí de les Cotxeres de Sarrià
- A29- Places de Sarrià i San Gervasi
- A30- Plaça de la Concòrdia
- A31- Monument a Pau Casals
- A32- El Carmel i Sectors Veïns
- A33- Parc de la Creueta del Coll
- A34- Jardins de la Torre Groga
- A35- Jardí de Nostra Senyora del Coll
- A36- Torre Baró
- A37- Renfe-Meridiana
- A38- Plaça Lluçmajor, Passeig Valldaura, Avinguda Rio de Janeiro i Via Julia
- A39- Plaça Sòller
- A40- Eix de Vianants a Sant Andreu
- A41- Plaça Mercadal
- A42- Plaça Mossén Clapés
- A43- Plaça d'Eix
- A44- Parc Pegasso
- A45- Parc del Clot
- A46- Carrer Prim
- A47- Plaça de la Palmera

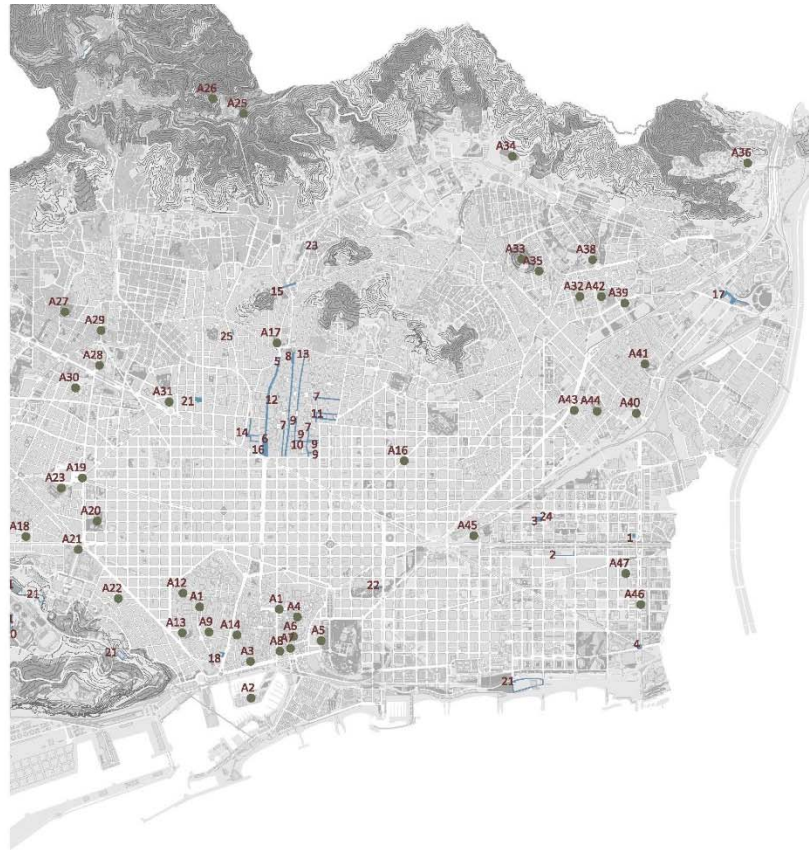


Figure 5. Location of the most representative performances of the City of Barcelona in the two periods of Urban Renewal

3.1.2. Urbanization 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 “Jardinetes” 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 “Jardinetes”, 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.

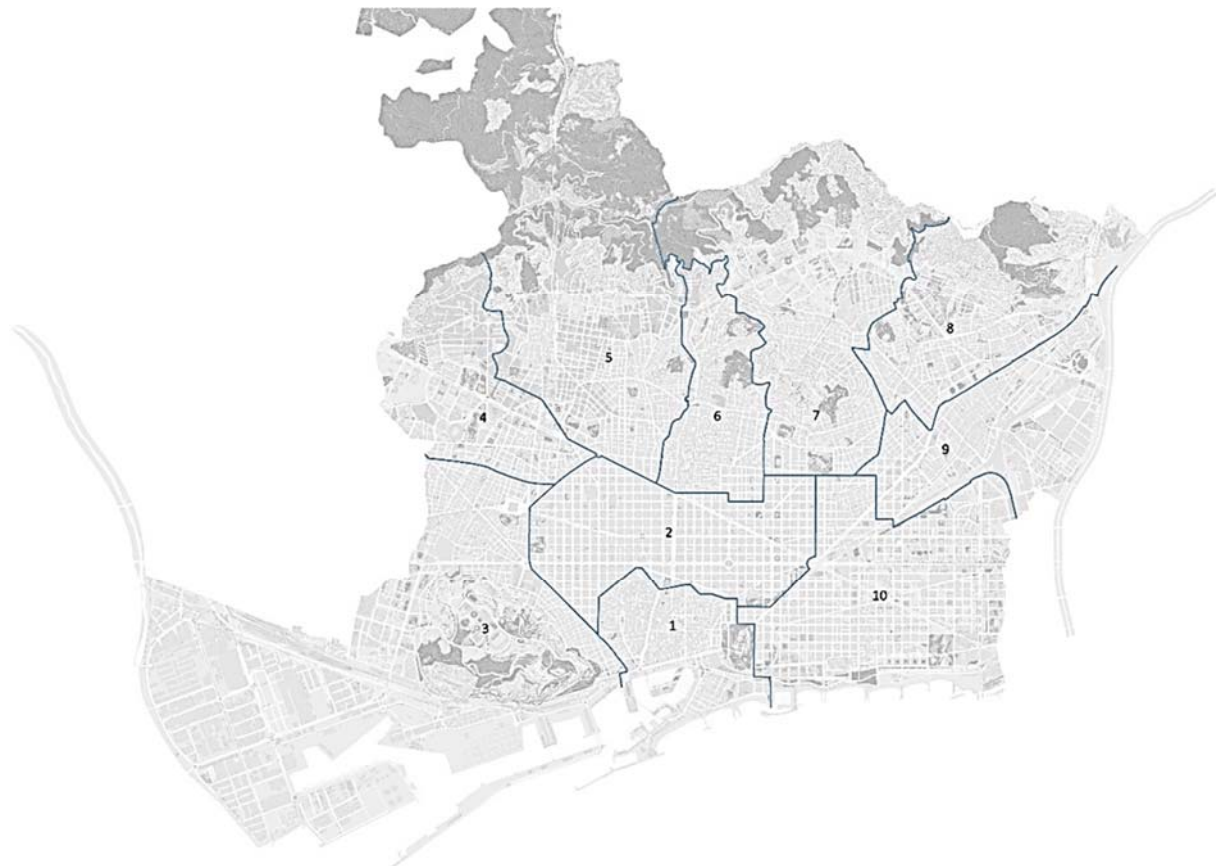


Figure 6. Districts of Barcelona: 1 Ciutat Vella; 2 Eixample; 3 Sants-Montjuïc; 4 Les Corts; 5 Sarrià-Sant Gervasi; 6 Gràcia; 7 Horta-Guinardó; 8 Nou Barris; 9 Sant Andreu; 10 Sant Martí.

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.

References

- [1] AAVV, Director: José Antich, "Barcelona a city of vanguard, The construction of a city, Vol.2" La Vanguardia Ediciones, SL. 2006.
- [2] AAVV, Director: José Antich, "Barcelona a city of vanguard, The news is Barcelona, Vol.1" La Vanguardia Ediciones, SL. 2006.
- [3] AAVV, Director: Ivan Bercedo-Jorge Mestre, "Magazine Notebooks of Architecture and Urbanism" Col·legi d'Arquitectura de Catalunya, 2004.
- [4] Manuel de Solà-Morales i Rubió, "Forms of urban growth" Edicions de la Universitat Politècnica de Catalunya, SL. 2003.
- [5] Jordi Borja-Zaida Muxí, "Public space: city and citizenship" Diputació de Barcelona, 2001.
- [6] Ajuntament de Barcelona Àrea d'Urbanisme "Plans and Projects for Barcelona 1981-1982" 2^a Edició. Ajuntament de Barcelona, 1993.
- [7] Dirección de Servicios de Urbanismo "Projecting the Metropolitan City. Works, Plans and Projects. 1981-1986". Corporació Metropolitana de Barcelona. Asesoría de Comunicación y Relaciones. Servicio de Publicaciones, 1988.
- [8] Vicente Guallart, Carles Bárcena y Ricard Gratacòs "Plans and Projects for Barcelona 2011-2015" Actar Publishers and Ajuntament de Barcelona, 2015.
- [9] Juli Esteban i Noguera "Elements of Urban Planning" Publicacions del Col·legi Oficial d'Arquitectes de Catalunya, Editorial la gaya Ciència SA, 1980.
- [10] Joan Busquets "Barcelona. The urban construction of a compact city" Ediciones del Serbal, 2004.
- [11] Oriol Bohigas "The reconstruction of Barcelona" Ediciones 62. Barcelona, 1985.
- [12] J. Antonio Acebillo "From Plaza Trilla to the Olympic Village" Olimpiada Cultural, Barcelona, 1990.
- [13] Ignacio Sanfeliu Arboix "Ephemeral architecture" tesis doctoral, 1996.
- [14] Jaume Vendrell "Metropolitan performances and proposals in public spaces" Barcelona, 1994.
- [15] Joan Antoni Solans "The use of land in the central metropolitan system during the period 1980-1998" Barcelona, 2002.
- [16] Carme Miralles "Transport and city" Barcelona, 1997.