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## PUBLIC SPACES IN KNOWLEDGE CIVILIZATION CITIES – PART ONE: BARCELONA

### PRZESTRZENIE PUBLICZNE W MIASTACH CYWILIZACJI WIEDZY – CZĘŚĆ I: BARCELONA

#### Abstract

The city as a product of man's civilization undergoes constant transformations, whereas forecasts announcing its collapse appear to be off-the-mark. After the industrial city and the postindustrial city, comes the knowledge civilization city. It turns out that ultramodern knowledge civilization cities – filled with the spirit of the information revolution as well as functions based on education and contemporary information technologies – have not developed their own type of public spaces so far. The author of this article aims to present some park spaces implemented in contemporary Barcelona. They neighbour on the grounds of 22@Barcelona which have remained under intense functional and spatial transformations since 2000. Numerous researchers acknowledge this project as a model knowledge civilization city.

*Keywords: globalization, public space, postindustrial city, knowledge civilization city, park*

#### Streszczenie

Miasto, jako wytwór cywilizacji człowieka, ulega ciągłym przemianom, a prognozy wieszczące jego upadek okazały się nieprawdziwe. Po mieście industrialnym i postindustrialnym, obecnie nastal czas miasta cywilizacji wiedzy. Okazuje się, że na wskroś nowoczesne, przepelnione duchem rewolucji informacyjnej i opartymi na edukacji i współczesnych technologiach IT funkcjami, miasta cywilizacji wiedzy nie wykształciły dotychczas własnego typu przestrzeni publicznych. W niniejszym artykule autor stara się przedstawić współcześnie realizowane przestrzenie parkowe w Barcelonie. Sąsiadują z poddawanymi od 2000 roku głębokim transformacjom funkcjonalno-przestrzennym terenami 22@Barcelona, uważanymi przez wielu badaczy za modelowe miasto cywilizacji wiedzy.

*Słowa kluczowe: globalizacja, przestrzeń publiczna, miasto poprzemysłowe, miasto cywilizacji wiedzy, park*

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## 1. Introduction

The city as a product of man's civilization undergoes constant transformations. First and foremost, its physical structure – urban tissue changes under variable economic, social, political and historical circumstances. The increase in the global population, which could already be observed during the First Industrial Revolution in the 18<sup>th</sup> century, has accelerated violently in the last four decades of the twentieth century; its pace has not slowed down since then<sup>1</sup>. It is estimated that as many as 70% of the inhabitants of our planet will live in cities by the year 2050; in 2008, the number exceeded 50% and is still rising. It is thought that the global population increases by one million every week.

In the past thirty years, troublesome heavy industry and mass production have been withdrawing from European cities and rich developed countries, such as Canada, the USA, Japan or Australia, to different regions of the world, mostly to such dynamically industrialized and intensely growing places as India, China, Southeast Asia, Russia, Brazil and Central Asian countries which came into existence after the disintegration of the Soviet Union. Thus, one can draw a conclusion that they are entering another industrial epoch or even that some of them are experiencing it for the very first time. In many cases it is true. However, current transformations are of much more dynamical character than those which took place in the previous centuries in European and North American cities. Some other developmental processes unrelated to industrialization can be observed there as well. In the functional and morphological aspect, their urban structures simultaneously undergo multidirectional development determined by various factors and stimuli. If it is at all possible, some of them become both industrial cities and knowledge civilization cities at the same time.

Thus, forecasts from several decades ago which said that the developing information economy would lead to the collapse of cities, turn out to be off-the-mark. In spite of possible alienation and separation caused by the intensive development of modern technologies, people still wish to settle down, work and stay together, which has been portrayed by numerous studies in the field of urban sociology as well as architecture and urbanism<sup>2</sup>. In those globalization days, the role and significance of cities also changed, and competition between cities rose. More than ten years ago, Zygmunt Bauman claimed that the national state was eroding or withering<sup>3</sup>. As he rightly noted, supranational forces control the development of the worldwide economy as well as the flow of technology and knowledge. Even though global corporations and international organizations with various trade profiles can change their headquarters very quickly thanks to digital tools, they are usually situated in the cities. At present, cities and their regions instead of nations compete on the world arena in the race for attracting global capital and prestigious institutions, including those related to culture and knowledge-based activities.

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<sup>1</sup> From about three billion in 1960, through more than six billion in 2000, to nearly seven billion in 2011. One third is the total population of two Asian countries: China and India. The urban population grows fastest in the developing countries, while an opposite phenomenon can be observed in a number of developed countries. Cf.: *Demographic Yearbook 2011* ([www.stat.gov.pl/cps/rde/xbcr/gus/PUBL\\_sy\\_demographic\\_yearbook\\_2011.pdf](http://www.stat.gov.pl/cps/rde/xbcr/gus/PUBL_sy_demographic_yearbook_2011.pdf) – access on 12.12. 2012).

<sup>2</sup> Prof. Anna Palej's surveys seem particularly interesting on the Polish ground – cf. e.g.: [19, 20].

<sup>3</sup> Bauman Z. [2]; this thesis also appeared in other books by the same author.

Modern research institutes, technopolises, innovative centres of production and education, usually located on the basis of urbanized areas, come into being in a number of rich countries situated mostly in the northern hemisphere but also in the dynamically and multi-directionally developing Asian countries. Changes in the social structure of cities follow these modernizations. The industrial society is being visibly transformed into the knowledge civilization society. It is much more vivid in the abovementioned regions than in other parts of the globe. This process is not as intense as it was in the case of the transformation of the agrarian society into the industrial society in the 19<sup>th</sup> century – it is of a more evolutionary character. Education and culture have a significant role to play. More sophisticated social needs and requirements with reference to the quality and layout of open-access urban spaces than those observed in the bygone historical periods, form one of the features of the contemporary knowledge civilization city.

## 2. The Global City versus the Knowledge Civilization City

Since the mid-1980s, urban sociologists and – more and more frequently – specialists in other fields, including architects and urban planners, have been using the term global city. It defines metropolises which act strategically as the traditional centres of international trade and banking on the global arena but also as decision-making hubs in the system of the worldwide economy, finance and specialist services, as places where innovative solutions come into being as well as markets for exchanging products, knowledge and innovations. Two essential features of the global city are their decision-making functions on international markets and the developed IT structure in global communication<sup>4</sup>. It is generally assumed that, besides the aforementioned qualities, one of the characteristics of a global metropolis – apart from an extensive transport infrastructure, including a big intermodal transfer junction connected with an intercontinental airport, or a large population with international roots – is the presence of cultural and scientific institutions of repute. The dominating opinion says that today's Europe has only one metropolis which satisfies all these conditions and therefore can be called a global city – London<sup>5</sup>. The remaining big cities on the continent just aspire to this role so competition with each other and with other world metropolises is naturally rising. Currently, Asia has the vast majority of global cities.

Is the global city identical with the knowledge civilization city? Not necessarily, as it seems. In other words, there are many cities, especially in Europe and North America, whose growth has been conditioned by functions related to education and culture as well as being supported by the knowledge-based branches of economy. At the present stage of the development of man's civilization based on knowledge and information exchange, such centres may be called knowledge civilization cities. However, they do not fulfill all the necessary conditions imposed on would-be global cities. Such urban layouts are best exemplified by small, almost monofunctional university towns like Cambridge, Oxford

<sup>4</sup> The term **global city** was first used by Saskia Sassen in 1984 – cf.: [22] as well as a number of other publications by this author.

<sup>5</sup> [15, 22].

or New Haven and medium-sized urban centres important for the development of culture and knowledge: Venice, Florence or Krakow. They also include contemporary technopolises, such as Scottsdale, Arizona or Sophia Antipolis, Provence<sup>6</sup>. None of these towns and cities can be regarded as a global city. Undoubtedly, most global cities are knowledge civilization cities as well.

Against this background, it seems that some old European centres located in the Mediterranean have successfully joined the race for the denomination of a global metropolis in recent years. Their traditions reach back to the ancient Greek and Celtic colonization of this region. Now we must refer to two metropolises – Barcelona and Milan – which are much older than London. Their metropolitan areas have around five million inhabitants each. They are the second most important centres of industrial production, commerce and services in their countries after the capital metropolises; in some domains, they came to the fore a long time ago. They seem to satisfy all the criteria of a European global city. The capital of Catalonia, one of the most dynamically developing areas in the western part of the Mediterranean – Barcelona, has been recently designated as the seat of the Mediterranean Union. Milan is acknowledged as the financial and economic capital of Italy. These cities have also been important, developing centres of culture and science for centuries, therefore they are knowledge civilization cities for certain.

### 3. Public Spaces in European Knowledge Civilization Cities

It turns out that ultramodern knowledge civilization cities – filled with the spirit of the information revolution as well as functions based on education and contemporary information technologies – have not developed their own type of public spaces so far. Examining numerous science<sup>7</sup> and popular science<sup>8</sup> surveys as well as carrying out *in situ* studies which are of the greatest importance, one can get the impression that contemporary urbanism uses the archetypes of a square, a street, a forum and a garden juxtaposed anew. Having been proved for millennia in various cultures, they jointly create the landscape of the cities on our globe. One of the reasons for this state of affairs should be ascribed to the fact that they correspond with their essential user – man, who, contrarily to the products of his own civilization, remains unchangeable in his form as well as his elementary mental needs. Urban spaces meant for relaxation and recreation or even for a certain dose of contemplation and rest in the overwhelming turmoil of everyday life are of paramount importance in our times which require constant changes, haste and new stimuli<sup>9</sup> of everyone and everything.

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<sup>6</sup> In Polish science, the problems of a technopolis are best presented by M. Wdowiarz-Bilska in numerous surveys, including [24].

<sup>7</sup> for instance [12–14, 16, 19, 26].

<sup>8</sup> e.g. [1, 21, 25].

<sup>9</sup> [2].

#### 4. A System of Green Recreational Spaces in the Mediterranean City

The following examples of public park spaces implemented in recent years in the dynamically developing Mediterranean metropolis of Barcelona, make an attempt to find some new forms for two well-known elements of urban tissue – a park and a garden. It is obvious that fragments of similar spaces inside historical urban layouts are being redeveloped and modernized in this city, too. It is an inevitable and repeatable process related to the millennia-old harmonious growth of this metropolis. However, the presented examples are just little fragments of large contemporary urban layouts related to the programs of revitalizing certain degraded areas neighbouring on historical urban centres.

Barcelona is a compact city whose expansion was strictly limited because of its location on a seaside lowland bordered from two sides by the Rivers Llobregat and Besòs and from the third side by the mountain range of Collserola. It makes the foreground of a larger complex of wooded hills partially protected as national and scenic parks extending into the Iberian Peninsula. The natural conditions and the Mediterranean tradition of city building led to the concentration of urban tissue, both in the historical part of the city with its ancient roots – Ciutat Vella<sup>10</sup> – and the structure of Eixample<sup>11</sup> extended since the mid-19<sup>th</sup> century. At present, the urbanized area forming this gigantic metropolis with nearly five million inhabitants is unnoticeably crossing the abovementioned geographical barriers and conventional administrative divisions.

Apart from the forest complex of Collserola, Barcelona has relatively few vast park spaces considering its size and population<sup>12</sup>. One of the oldest spaces of this kind is Parc de la Ciutadella arranged for the needs of the World Exposition (1888) in place of a star-like fortress which once closed the system of city fortifications from the northeast. Most of the remaining parks occupy less accessible areas – steep elevations, such as Montjuïc, towering over the old town and the port from the west, or the three hills (Tres Turons) extending northwards from the district of Gràcia with the ancient Carmelite Monastery surrounded by two municipal parks: Parc Güell (designed by Gaudí) and Parc del Guinardó (a later project).

It does not mean that Barcelona lacks greenery. The city has developed a characteristic type of wooded avenue – la rambla, originally the bed of a periodic stream which turned into a gutter; then it was filled up and changed into a promenade. This pattern, which is repeated in the dense historical tissue<sup>13</sup>, was also copied in other Catalan cities (Girona, Figueres). These days, it is used as an element of the peculiarly understood tradition of a place and

<sup>10</sup> the concentration of urban tissue, with clearly cut out open public spaces as the negative, is a distinguishing feature of the Mediterranean cities. Numerous researchers write about it – e.g. K. Hofert [10] or Ch. Ingrosso [11].

<sup>11</sup> which, in the urban layer, has been implemented consistently for more than 150 years, on the basis of Ildefonso Cerdà's design approved in 1859 – the author presents this problem more comprehensively in other papers – [7, 8].

<sup>12</sup> c. 3,000,000 in 2012 ([www.bcn.cat](http://www.bcn.cat)).

<sup>13</sup> which results from the natural relief and the river network – streams flowing down from the mountains to the sea; the best-known example is the centrally situated Las Ramblas – a promenade halving the Gothic city; it was formed in place of a stream which was once changed into the city moat – [23].

local identity in contemporary residential districts within Barcelona's metropolitan zone, yet not always in a well thought-out manner<sup>14</sup>. The extension of Eixample also provided for smart wooded avenues, whereas most streets were lined with shady trees. Moreover, according to Cerdà's original premises, each of the orthogonal quarters was supposed to offer a green semiprivate space inside<sup>15</sup>. This idealistic assumption was soon verified by reality and the place was almost completely developed.

However, Barcelona has been under the continuous process of adapting, restoring and revitalizing its urban space for more than 150 years (including the Eixample project) which aims to create optimal living and working conditions for the inhabitants. As a result of the program of regaining urban enclosures within the quarters of Eixample realized since the mid-1980s, little green public and semipublic spaces, frequently related to cultural and educational functions, were arranged in more than forty of them. Various revitalization program implemented after the downfall of Franco's dictatorship as well as international events, such as the Olympic Games 1992 or the Forum of Cultures 2004, led to the formation of several dozen new public spaces in diverse scales, counting in those located within the administrative city borders only. The largest spaces are usually situated on the outskirts, whereas the smaller ones – also in the historical centre and at the meeting point with the most important elements of the urban structure (e.g. significant urban arteries, transfer stations) and the natural relief (e.g. the sea, the rivers). Green park areas, which used to be so scarce, are in abundance now<sup>16</sup>.

## 5. Contemporary Parks in Barcelona

In this paper, it would be unfeasible to present the complete typology of these spaces or at least have a cursory look at them. Thus, the author decided to describe two parks which came into existence within the previous decade on the borders of one of the most dynamically developing central areas in the city – 22@Barcelona, the former industrial district of El Poblenou. This area, divided into several parts, located on both sides of Av. Diagonal, comprises 115 typical blocks of Eixample<sup>17</sup> altogether. The multidimensional revitalization of this district is regarded as the most important urban project implemented in the metropolis within the previous few decades and one of the most ambitious projects realized in Europe which still brings about changes in the adjacent areas<sup>18</sup>. Operations on the grounds of 22@

<sup>14</sup> For instance, in the revitalized mass housing estate La Mina from the 1970s in San Adrià de Besòs located at the eastern administrative border of Barcelona. La Rambla de La Mina is cut of the street frontage by two tramlines crossing the lawn which may be one of the causes of disusing service premises on the ground floors. The authors of the urban concept of revitalizing this area, implemented gradually since 2000, are S. Jornet, C. Llop and J.E. Pastor – [8, 11].

<sup>15</sup> The author presents the structure of Eixample more comprehensively in: [6, 7]. Compare also: [10, 22].

<sup>16</sup> [8, 11, 18].

<sup>17</sup> a typical Eixample block (113 m × 113 m) is limited by the twenty-metre-wide streets – [23].

<sup>18</sup> First of all, the area of Glories with a building acknowledged as the symbol of the entire district of El Poblenou and one of the new landmarks in the city – Torre Agbar designed by J. Nouvel

and the areas which directly neighbour it, covering almost one fourth of the area of Barcelona in total, explicitly reveal the evolutionary character of the transformation of an industrial city into a knowledge civilization city<sup>19</sup>. Within the 22@ plan, a relatively extensive area considering the local conditions – 114.000 m<sup>2</sup> – was meant for public greenery<sup>20</sup>. This district will be surrounded with vast green areas, including the seaside promenade and the green framework of the River Besós. Owing to the latest urban project entitled Sixteen Gates to Collserola: From the Mountains to the Sea<sup>21</sup> – green corridors connecting the National Park on the hills with the urban tissue of Barcelona as well as with the Mediterranean Sea across the open public spaces, can become an active element of the metropolitan greenery system.

Owing to two parks which came into being on the grounds of the district of El Poblenou in recent years, it is becoming an attractive place of residence and work but, as far as the guarantee of suitable conditions for everyday recreation is concerned, it is getting ahead of other central districts which have no contact with large green complexes or the sea. One of the layouts under consideration is Parc Diagonal Mar directly connected with the system of city beaches from the southeast as well as with the green zones at Villa Olímpica and Parc de la Ciutadella<sup>22</sup>. Designed as one of the elements of the revitalization of the area related to the Forum of Cultures 2004 between Av. Diagonal and the Ronda Litoral ring-road running underground along the beach, it was implemented in the years 1997–2002<sup>23</sup>.

This park, occupying the approximate area of nine regular quarters of the Eixample grid, is cut across by several streets which guarantee access to some tall residential buildings, hotels and offices<sup>24</sup> arranged on two sides of a central pond. The introduction of private users and tall cubatures inside a public park, untypical under the European conditions, produced an unusual effect resembling North American seaside resorts. On the other hand, deconstructionist estheticism, characteristic of Miralles' designs, was used in the urban layer as well. In an obvious and intended manner, it distorts the orthogonal order of Cerdà's grid. Thus, these enclosures open to each other offering a curious sequence of green spaces, hardened surfaces as well as water levels and fountains. Authors say about their project:

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and implemented in 2006, widely described in the trade press and scientific surveys at the design and construction stage. We must not forget about the transformation of the eastern stretch of Gran Via, either – both areas were presented by the author in a separate paper [8]. Let us take note of the revitalization of numerous quarters within El Poblenou neighbouring on the 22@ project but not included in it.

<sup>19</sup> This unusually interesting project of revitalizing nearly 200 hectares at the former industrial heart of the city – Barcelona, just like Lodz, developed due to the textile industry which generated its growth and wealth for decades – was presented more comprehensively in the author's separate paper – [7].

<sup>20</sup> [www.22barcelona.com](http://www.22barcelona.com)

<sup>21</sup> [www.bcn.cat](http://www.bcn.cat); [www.minuartia.com/en/item/915-les-16-portes-de-collserola-16-opportunitats-per-millolar-la-relacio-entre-el-parc-i-la-ciutat.html](http://www.minuartia.com/en/item/915-les-16-portes-de-collserola-16-opportunitats-per-millolar-la-relacio-entre-el-parc-i-la-ciutat.html) (1.05.2013).

<sup>22</sup> cf. especially: [7, 11, 23].

<sup>23</sup> the authors of this design are EMBT – Enric Miralles and Benedetta Tagliabue – [11, 17].

<sup>24</sup> implemented by various architects in the years 1999–2012.

“What I like best about it, is this strong vibration. You come to this square and you see the pergolas, the fountains, the vegetation, the hanging vases, the movement of leaves on trees, the vibration of the shadows, which are the main things that we wanted to achieve”<sup>25</sup>. The irregular, soft shapes of individual park enclosures are divided by the walls and fences of the remaining investments which repeat the original lines of decorative structures. One of these small enclosures has a music park with some wooden devices and floor elements making various sounds. A large commercial centre situated east of the park opens towards it with wide terraces and a multitude of cafes and restaurants.

The most characteristic element of this park is its central area. This elongated, irregularly broken enclosure, limited by the abovementioned high-risers, is mainly occupied by an enormous cascade pond with a paved entrance square in the northeastern corner. Shaded by palm trees and plants growing from over-scaled pitchers, expected to climb individually over designed deconstructionist-expressionist pergolas, this square is the best-known fragment of the park photographed from every possible angle. The decorative structures – benches, seats, flowerpots, fountain piping and pergolas – are forms of wood, steel and colourful ceramics characteristic of EMBT designs referring contemporarily to the tradition of Catalan Art Nouveau, including Gaudi’s creations. The southwestern part of this park, located on the other side of the pond closer to the sea, is much greener. Smoothly mown lawns, diverse kinds of tall and low greenery, including the omnipresent palm trees colonized by countless parrots<sup>26</sup>, give it a much more intimate and recreational character.

The latest implementation, already composed into the city’s system of public spaces is Parc del Centre del Poblenou, arranged in the years 2001-2008 according to Jean Nouvel’s design<sup>27</sup> and sometimes regarded as controversial. It acts as the keystone between two largest parts of 22@Barcelona at the intersection of Avinguda Diagonal and Carrer de Pere IV – arteries that are crucial for the urban composition of this part of the city. This park, even though not included in the 22@ project, matches it ideally, also with respect to the protection of the postindustrial heritage of the district. It has some abandoned postindustrial objects under adaptation<sup>28</sup>. Factory smokestacks have always made altitudinal dominants in the landscape of El Poblenou. They act as characteristic, traditional mighty forms or landmarks which still inform people about the existence of an important function in the structure of the city. One of the objectives of the 22@Barcelona project is to encourage the landowners to take advantage of their postindustrial monuments and give them a new value by incorporating them into the recently raised objects or adapting them to a new function which was realized successfully in many cases<sup>29</sup>. Such stacks were preserved on the park grounds, too.

Parc del Centre del Poblenou is much smaller than the other layout, occupying just around four quarters of the Eixample grid and without open water levels. It is consequently

<sup>25</sup> [www.mirallestagliabue.com/projects\\_all.asp](http://www.mirallestagliabue.com/projects_all.asp) (1.05.2013).

<sup>26</sup> Monk Parakeet also known as the Quaker Parrot (*Myiopsitta monachus*) is a species of South American parrot best adjusted to cooler climates; it is being reintroduced in many regions across the world ([www.bcn.cat](http://www.bcn.cat); [www.encyklopedia.pwn.pl](http://www.encyklopedia.pwn.pl)).

<sup>27</sup> [www.jeannouvel.com](http://www.jeannouvel.com)

<sup>28</sup> the most probably it would be transformed into Barcelona Architecture Centre ([www.bcn.cat](http://www.bcn.cat)).

<sup>29</sup> besides the high-risers of steel and glass, the stacks are characteristic dominants in this district – [7].

a little drier and hotter than Parc Diagonal Mar yet offers some interestingly arranged green spaces. Fitted with surrealist sculptures and sports facilities, it acts as a recreational oasis at the heart of a dynamic central district. The Parc consists of small interiors, sometimes divided by streets and walls, sometimes just by the vegetation and architectural installations. It is filled with different ideas. An area resembling a lunar landscape has a pneumatic refuse-collection plant, a further example of Jean Nouvel's concerns to preserve the environment, as is the fact that most of the park, with its dense vegetation comprising willows, shady trees, lianas and flowers, is irrigated by groundwater. Nouvel wanted his signature park to be used by the entire community, combining different habitats where they can relax in the metal chairs in the shade of lush, colourful plants and trees<sup>30</sup>.

Owing to its location at the intersection of the most important transport and composition axes within 22@ and in the vicinity of the historic promenade Rambla del Poblenou, it plays a very important role in the urban composition of this fragment of Barcelona. The Mediterranean Union has its headquarters here. Some experts criticize Nouvel for surrounding the park with a tall iron fence with few entrances and insights which supposedly cut it off from the nearby public space of the city<sup>31</sup>. Indeed, it was designed as a secret garden which reveals all of its beauty only to those who decide to enter this green enclave. We must remember, however, that its northern corner, behind the tall fence partially covered with expanding climbers, hides some infrastructural facilities related to the technical service of the nearby residential and office quarters. The fence is more perforated as it approaches the sea. The park is cut across by a street running between two glazed walls, which secure visual contact with the enclosure, in a green tunnel formed of climbing plants that give shade – so desirable in the Mediterranean climate. This park, or perhaps this garden, is of a much more introverted and intimate character than the other one. Its best-known element is a flower garden arranged around a spiral ramp. On hot summer days, temperatures pervading inside this mini-enclosure combined with the intensive fragrance of herbs and flowers as well as the spiral road can really make visitors dizzy. The sports facilities are very popular with the local residents and the employees of the office buildings which neighbour the park.

## 6. Conclusions

In spite of some considerable social, functional and civilization changes, the cities have been using certain invariable elements jointly creating their urban tissue since antiquity. One of the elementary public spaces, older than the very idea of the city, is the garden (the sacred grove). In various typologies, gardens are also present in the history of urbanism collectively forming some significant sequences of the urban composition of cities in Europe, the Middle East, Asia and Mesoamerica. The idea of the park as a place for taking a rest from the noise and turmoil of the city appeared in modern times to develop intensively in the nineteenth century, in the days of industrial civilization. In the postindustrial city,

<sup>30</sup> [www.barcelonaturisme.com](http://www.barcelonaturisme.com) (1.05.2013).

<sup>31</sup> [10].

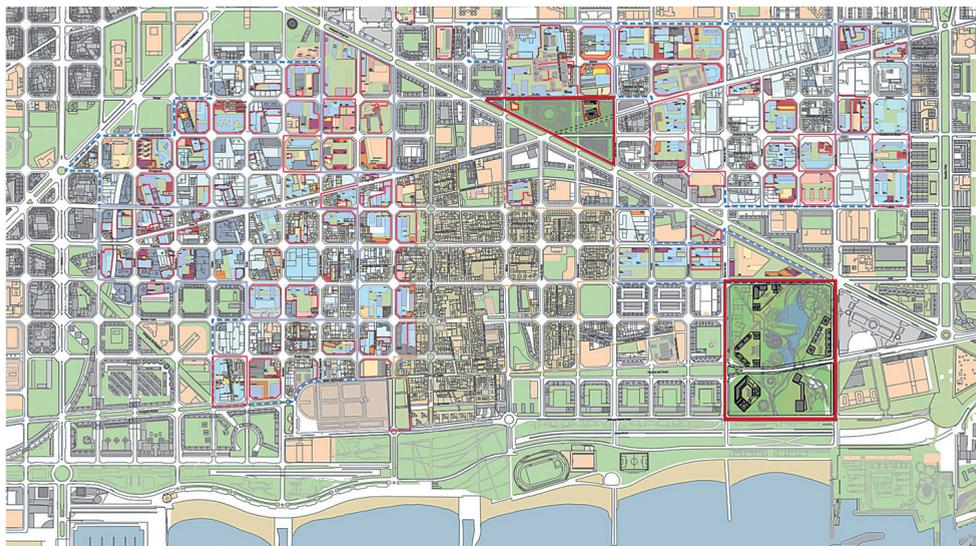
open-access green areas were of paramount importance for the construction of a proper urban housing environment, relaxation and recreation zones as well as prestigious sequences of an urban public space.

Parks and green areas still seem highly important for the proper functioning of the expanding knowledge civilization cities. Individual projects differ in details and in the typologies of currently designed urban green zones<sup>32</sup>. Despite such inventions as the Internet, virtual reality, creative accounting, tourist space flights and state-of-the-art devices based on information technology, knowledge civilization has not developed any previously unknown kinds of urban public spaces in their physical, non-virtual form so far. Contemporarily, the city is becoming man's natural living environment, whereas man himself is becoming an urban species out of necessity. On account of his complex physical and psychological needs, however, he cannot lose contact with nature or at least its substitute in the shape of city parks.

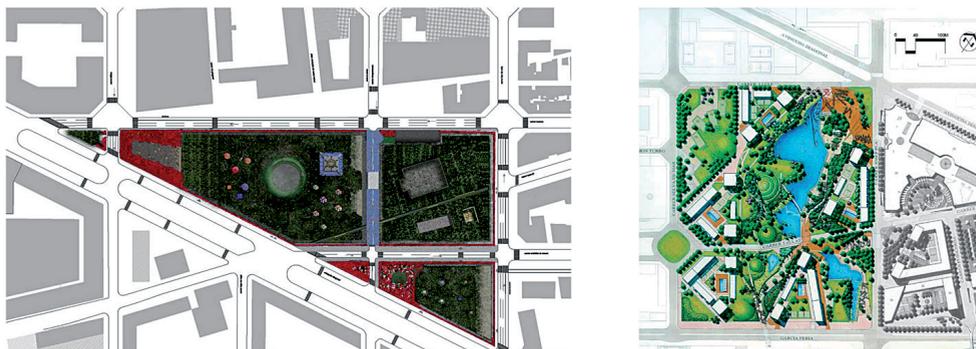
The presented example of Barcelona shows that the matrix of the nineteenth century city of the future – Eixample which was an innovative concept 150 years ago – proves perfectly correct while creating contemporary spatial and functional structures for the knowledge civilization city. The 22@Barcelona project changes the urban, social and functional structure of degraded postindustrial central areas and contributes to the transformation of a large fragment of the city, including the surrounding terrains. In spite of the innovative forms of their decorative structures, Parc Diagonal Mar and Parc del Centre del Poblenou, presented in this article, use the existing urban structure as well as the elements which build a compositional and functional layout. Well-known from the history of architecture and horticulture, they have been successfully applied in urban recreational areas for years.

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<sup>32</sup> [1, 4, 6, 9, 12, 16, 25, 26].



THE AREA OF 22@BARCELONA INTERVENTION WITH THE POSITIONS OF PARCS:  
DIALONAL MAR (bottom right) AND PARC CENTRAL DEL POBLENOU (centre)



III. 1. Barcelona, plans of Parc Diagonal Mar and Parc Central del Poblenou with their position within urban fabric (collage by author on the basis of plans taken from: [www.22barcelona.com](http://www.22barcelona.com); [www.vebidoo.de](http://www.vebidoo.de); [www.donnegeometra.it](http://www.donnegeometra.it) – 22.06.2013)



III. 2. Barcelona, Parc Diagonal Mar opens towards the sea (photos by author, aerial view: [www.territori.scot.cat](http://www.territori.scot.cat) – 03.05.2013)



III. 3. Barcelona, Parc Central del Poblenou is surrounded by dense urban tissue (photos by author, aerial view: [www.territori.scot.cat](http://www.territori.scot.cat) – 03.05.2013)



III. 4. Barcelona, Details of urban furnitures and lanscaping – Parc Diagonal Mar (above) and Parc Central del Poblenou (below) (Photos by M. Gyurkovich)

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