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CHESSBOARD

SZACHOWNICA

Abstract

Barcelona is a city that was designed as a finalized urban piece and has been realized over subsequent decades. It is interesting to see how the architects and municipal authorities used the urban plan at particular stages of the construction. Did the game, which has been running for 150 years, between the urban plan and the construction of buildings have an effect on the plan and architecture, and to what extent? A study of this issue is significant today and for our cities.

Keywords: town planning, work of town planning art, Ildefons Cerda, Barcelona

Streszczenie

Barcelona jest przykładem miasta, które zostało wymyślone jako skończone dzieło urbanistyczne, a potem przez dziesięciolecia było i jest realizowane. Jest interesujące jak dalece w poszczególnych, co bardziej interesujących okresach wzmożonego ruchu budowlanego, architekci i miejskie władze odnosili się do planu miasta? Czy i do jakiego stopnia gra jaką prowadzono od stu pięćdziesięciu lat pomiędzy planem a pokrywaniem go budynkami, wpływała na plan i na architekturę? Studium takie ma znaczenie i dziś i dla naszych miast.

Słowa kluczowe: urbanistyka, dzieło urbanistyczne, Ildefons Cerda, Barcelona

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1.

The encyclopaedia says that chess was invented over twelve centuries ago. The game has had many varieties, but one thing was permanent: the game has always required a board called a chessboard. This board was the site of victories, defeats or ties that were the result of the positions of the chess pieces or an agreement between the players. The second fundamental of chess is the ability to think strategically, the lack of which makes playing chess impossible. We can expand or simplify this statement by mentioning the need to remember the past moves of the pieces and predict future ones, or we can describe the game in a different way. The abundance of descriptions of the game will not change the way that the game of chess is seen: chessboard and thinking. A game on the chessboard. Some people play for fun. Others play to taste victory. There are also those who play for money. In short, adrenaline, power and profit. If we were to list the reasons why cities are built, they would be exactly the same.

2.

The chessboard is nothing more than a pattern. Basically anyone can make one, from pre-schoolers who draw square fields and jump on one leg from one to the other, tic-tac-toe players, crossword makers and tillers to Mendeleev with his periodic table, and the contemporary creators of matrices. Somewhere in the middle of the list there are the creators of urban chessboards.

3.

The city of Miletus reconstructed with the help of Hippodamus was characterized by the very sought-after order which embodied the magnitude of the city. The reconstruction was a success, in the gridiron plan there was enough space for a theatre, agora, gymnasium and a stadium. Some think, however, that Hippodamus, by letting the inhabitants of Miletus out on the chessboard of streets surrounded by defensive walls, made them feel like rats in a labyrinth without any chance of escape or contact with the external world.

4.

China and Japan – urban chessboard plans that reflect the social structure. Roman cities with *cardo* and *decumanus*. Mediaeval cities founded on the basis of various rights, with quarter street grids enclosed within defensive walls. American cities, i.e. as it is sometimes said, the result of two arithmetic operations: division into plots of land and multiplication of floors. We already know all the urban chessboard plans, we have discussed them on multiple occasions. What has not been discussed as thoroughly is the urban game which we took up later, at the time of transition between the pre-modern era and the contemporary era.

5.

In the middle of the 19th century we were ready to create a modern city, i.e. a city featuring high-tech inventions which simplify the life of its inhabitants, and development solutions which adorn the city; the former and the latter introduced on a scale adequate to the city. We used to consider Barcelona the first city to run for the title.

In the middle of the 19th century Barcelona was ready for it. Production plants, including the largest textile manufacturing plants in Spain, are one thing. Then, there was the port which enabled the *indianos*, the wealthiest representatives of the new elite of the city, to grow rich by accumulating wealth in colonies selling sugar, rum, cotton and slaves. Third, real property owners. They had to use their money in some way – the financial resources (despite the crises arising every now and then) allowed for the expansion of the city. Then, there was the need to improve the hygiene in the city, as illustrated by the data saying that in the 1840s the average life expectancy for the working class was 19.7 years and for higher classes 38.3 years. Another factor which favoured the reconstruction of Barcelona was the change of military doctrine. The troops went out of the city to fight battles, instead of just waiting for besiegement in citadels which had to have empty space around them to enable the soldiers to fire at the enemy. Hence, the widespread removal of defensive walls and the construction of new buildings outside the old confines in the middle of the 19th century. This is what was supposed to happen also in Barcelona.

Under these circumstances, the city invited tenders for plans for the new quarters of the city on the recovered lands. The fate of the tenders is widely known (at least, among architects) and there is no need to recall it. As a result of the organizational chaos, the concept of Ildefons Cerdà was selected. The concept was based on a square grid of streets whose side was 113.3m. The basic width of a street was 20m. The street blocks had cut corners and the space created in this way was intended for small squares intended for service outlets and as the meeting place for the inhabitants. The grid covered the entire area between the old town and the hills in the north. Large diagonal arteries cross the grid enabling the introduction of public transportation which enabled the masses of people to travel between the distant points of the city. That was the plan, and soon the game for its implementation began. Cerda played the game advocating for urbanization of the countryside and ruralisation of the city, which one can deem the beginning of the process which today we call sustainable development.

6.

In his play for a new Barcelona, Cerda first prepared detailed plans of construction sites, which, as obvious as it seems, was not usually practised at the time. Furthermore, on the way to his *General Theory of Urbanization* (published in 1867) he had applied to Barcelona the principles which were later generalized: operations based on statistical studies and stock-taking reports, restructuring of ownership (think about the incompetent attempts of property integration in Poland), the artistic aspects of urban planning and formulation of detailed plans (I expect that our bright constitutionalists remunerated by the property owners would have a lot to say on the subject), economical implementation strategies, including implementation decrees which improved the quality of life in the city. Plus, the surprising (at the time) care for social life manifested by, for example, the introduction of squares in the middle of

quarters that consisted of 25 blocks. He wrote that for the inhabitants these are a small world or an elementary city being a part of the entire city. But it is nothing more than the implementation of the ‘small is beautiful’ principle which has become extremely popular in our time.

7.

Cerda’s play with the city was spectacularly resumed every now and then. The first player was Antoni Gaudi who, according to his biography written by Gijs van Hensbergen (*Gaudi: A Biography*, Polish edition: Wydawnictwo Marginesy, 2015), ‘shaped and cut a building tearing off walls and entire rooms, adjusting the broken profile as though it was a plaster sculpture or a paper model.’ When searching for the reasons for this work method, the biographer cites another writer: ‘In Spain there are no half measures ... therefore, they are either capable of creating a masterpiece or an unheard-of horror’ (A. Ganivet, *Idearium Espagnol – Spain. An Interpretation*, Eyre & Spottiswool, London, 1946). But look at Casa Vincens, Casa Batllo, Casa Mila, Park Guell and its palace, finally at the Sagrada Familia. After a pilgrimage around these stops on Gaudi’s creative journey that shows us the architectural image of heaven and harem, and looking at Barcelona, the city of miracles (as van Hensbergen himself puts it), one can perceive the way in which Cerda, a genius and creator of urbanism, and Gaudi, the genius of architecture and soon a beatified patron of architects, complement each other. When you compare the dates of their life, you will see that Gaudi, 37 years younger than Cerda who died prematurely, was working at the time on the construction of *Eixample*, and if he had only wanted to, he could have been more careless about the rigid city plan. But he did not want to. What he could have done is illustrated by the Park Guell situated outside *Eixample*. Designed as a city-garden, it has no inhabitants, but is full of mosaics made of shattered tiles arranged with the use of the flexible *trencadis* technology to form unusual patterns. The garden features hills with different inclination levels, mysterious grottoes, and dragon’s caves in places where they did not exist, and tropical trees instead of native plants. Let’s cite van Hensbergen one more time: ‘Gaudi’s programme was a unique combination of classical myths, the history of Catalonia, Catholic liturgy, and the remembrance of martyrdom’. Couldn’t the author of such a programme, with the financial support of Eusebi Guell, change Cerda’s plan? He did not want to – his game strategy consisted in the refusal to conform to any rules. Remember his example.

8.

Gaudi, in turn, was joined in his game during the Franco years 1936 – 1939, when the archives left behind by Gaudi were destroyed, because Franco considered all the pieces in the archives to be too Catalan, deviating from the uniform Spanish model, which was something the General could not stand. Under these circumstances, the game with Gaudi, Franco and with us was resumed in the 1990s by the conservators restoring the Guell palace – with no drawings of the arrangement of tiles on the pinnacles and in other places, they decided to shatter any tiles whatsoever and arrange them according to their own understanding of Gaudi. The effect is gorgeous, as confirmed by thousands of pictures taken by tourists and spread all over the world.

9.

The second stage of Cerda's plan begins with the years of preparations for the 1929 world exposition and concludes with the "Plan Macia" dated a few years after the exposition. On one hand, there were the objects from the world exposition around the Plaça d'Espanya, including the Spanish village, which, generally speaking, promoted the traditional house and garden, i.e. the local variety of a city-garden. On the other hand, encouraged by the German exposition pavilion designed by Mies van der Rohe, or the modernist architecture trends in Europe fuelled by the frequent visits to Barcelona by Le Corbusier who worked on the CIAM congress on a functional city. The contribution of the Catalan group to the works of the congress is the aforesaid Plan Macia. The plan reconstructed Cerda's concept by expanding the one-hectare blocks to sixteen-hectare blocks introducing a grid of streets 400m wide and long. This is how a New Barcelona, a functional city standing in opposition to the 'out-of-date city of the 19th century' was supposed to be constructed after 1934. But before anyone managed to actually start the reconstruction and adaptation of Cerda's concept, the war broke out and put an end to the plan. We do not know what a New Barcelona would look like today. Today, to the west of Carrer de Tarragona and to the south of Avinguda del Paral·lel, the streets that start at the Plaça d'Espanya, where the New Barcelona was supposed to start, loose urban planning rules prevail.

10.

The third stage of Barcelona's urban planning game began in 1985 when the construction of the Olympic village along with the construction of a modern waterfront area of Barcelona began. Cerda did not include it in his plans – he left a strip of railway and industrial land between *Eixample* and the coast. But the circumstances changed and Barcelona could not afford to lose such an opportunity – the point of contact between the land and the sea was a sought-after location which was becoming more and more valuable both in terms of economy and image. Therefore, where Carrer de la Marina reached the sea it was connected to Cerda's grid, which required its minimum deformation, probably to emphasize the postmodern spirit of the time.

11.

After the experiences of 1985–1992 it all became easier. Avinguda Diagonal was led down to the seaside where in 2004 the Forum was constructed and is being expanded to this day. The place is situated in the corner of *Eixample* where Cerda did not plan to construct more blocks, but large parks which were supposed to spread over the area to the east of *Eixample*. The inhabitants finally got parks, but different from those built at the time of Cerda. A large, concrete plane rises above the coastal motorway. Here and there, there are groups of small trees, and then the plane descends towards the sea like a human-made cliff. Among the concrete rocks there are amphitheatres and a yacht marina behind which, standing like a giant statue, there is power plant with four chimneys. The rocks are connected with bridges, ramps and stair-shaped folds at a large scale.

The walk through the square begins next to the Museum of Natural History designed by Herzog and de Meuron. A few metres above the heads of passers-by there is a large triangular

solid, the length of its sides is around 100m, heavy, concrete in a navy-blue colour, crossed by vertical strips of narrow, one-way glass windows. It seems that you can pat it on the bottom and at the same time you do not know how it stays in place. The space under the museum is not dark but black: in the gaps you can see some things far away, I ask myself: should I really walk under such a thing? Teenage skateboarders and scouts who rest in the shadow do not share my doubts and neither does the man who failed to find a public toilet in the Forum.

The square of the Forum features a large solar panel structure. Seen from a great distance, it seems like a relatively small, sloped plate. As you get closer, the plate becomes enormous. It is supported by three concrete pillar legs, and it casts a shadow the size of a football pitch. It is not possible to take a picture of the entire structure. In fact, photography enthusiasts face quite a challenge in the Forum: you simply cannot photograph it in its entirety. It is more like a landscape than an urban building and it puts an end to the town centre in the east, just like Montjuic flanks Barcelona in the west. Everything according to the concept of Cerda.

12.

Finally, the architecture of today, Placa de les Glories Catalanes. It is enough to say that this is the place where one glance is enough to embrace the lecture hall designed by Rafael Moneo, the theatre designed by Ricardo Bofill, the design museum of MBM (O.Martorell, O.Bohigas, D.Mackey), and the Torre Agbar designed by J.Nouvel. Moreover, among these masterpieces connected by beautiful squares, there is the largest municipal marketplace. Of course, the market was there first, but this does not alter the fact that this is the place where high culture mixes with everyday life.

But the marketplace is not a poor relative – in 2014 it ranked among the first forty works nominated for the Mies van der Rohe Award. The team of Fermin Vazquez decided on a simple but brilliant design. Above the marketplace there is a huge roof made of triangular mirror planes standing on slim and tall pillars. As a result, there is an illuminated, mirror cloud above the market, which reflects people's actions and, often, displays of affection. From a large distance you can hear a humming sound, which sounds like hundreds of beehives. As you get closer the noise increases and you can distinguish the voices of inviting salesmen which form a chorus when you enter the marketplace. The mirrors above reflect thousands of buyers and sellers standing upside down and it seems weird that none of them is falling down. The place is filled with a golden glimmer. Whichever way you choose to enter the square, during the day or at night, you will always encounter the same sight of a beautiful urban landscape.

I think that Cerda would be happy. His plan did not provide for the square of land large enough for a few blocks situated aslant in relation to his blocks. It was intended for a transport hub, but it is possible that the undeveloped land was supposed to encourage us, his successors, to whom he left the name of our profession, to act. Did he think of time as the fourth dimension of space? Was the sloping edge on his plan supposed to provoke us to a greater freedom than in other points of *Eixample*? We can only speculate, but one thing we know for sure: the game with Cerda's concept was won by both sides, a thing which is not possible on the pitch, but it is possible in the city where the win-win principle is a not only a possibility but a must. And this is why we should study everything that happens on the chessboard of Barcelona.