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The Master's Creed: Richard Rogers

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ABSTRACT
The article is dedicated to the works of Richard Rogers and the architectural company he is leading — Rogers Stirk Harbour+Partners (RSHP, the UK). The numerous and diverse projects of this company always carry the master's signature approach. They are easily recognizable by their rationality and abundance of color and light. Each of the company's works is characterized by the dedication to the professional and ethical principles formulated by Rogers early in his creative career, which are shared and consistently developed by a team of his like-minded associates. The analysis of the most outstanding of the company's building constructed in the recent years, such as Leadenhall in London (2014), allows us to speak of the time-tested professional creed of the master, whose contribution to the development of architecture is highly appreciated by the global professional community.

Keywords: *architect Richard Rogers, Rogers Stirk Harbour+Partners (RSHP), High-tech architecture, Leadenhall building*

I. INTRODUCTION

Richard Rogers's buildings are easily recognizable regardless of scale and purpose. They are characterized by extreme thoughtfulness and ingenuity, constructive logic turned into art, and the highest quality of the realized buildings. They never lose their image of 'architecture from the future' no matter if they were built fifty years ago or in the last couple of years. Almost every year, one or two projects carried out by the company led by Richard Rogers — Rogers Stirk Harbour+Partners (RSHP) — are nominated and awarded by the Royal Institute of British Architects (RIBA). Other UK awards, awards from the countries where the company's buildings appear, and prestigious international awards are too many to be counted. The analysis of these buildings consistently confirms the authors' commitment to the principles and methods developed by Rogers early in his career.

Few of the contemporary architects started their professional way with writing an architectural manifesto. And even fewer of them managed to bring those manifestos to life almost word by word, as it happened with the Pompidou Center. It is paradoxical that his creative approach is easily recognizable, since Rogers' principle has always been not to work in a certain style, not to design buildings as monuments, not to make architecture for its own sake. He is considered the founder of the hi-tech style, but unlike Frank Lloyd Wright or Richard Meier, he has not created his own 'personal style'. At the same time, the style he developed is the style of working within the framework of creative principles formulated in his youth. Those principles gradually turned into his ideology, which his company has also adopted. He and his team have always been guided by the idea of creating a building as comfortable and as flexible in use as possible, based on the most suitable high-end technologies, that would fully answer its purpose.

Equally important is his taking into account the environment, which in different cases is solved differently — either subtly contrasting and interpolating into the existing built-up environment and historical location — the Lloyd's building (1999) and the Leadenhall skyscraper (2014) in the City of London, or dissolving in the context and not contradicting with the environment — the storage and exhibition buildings for the British Museum in London (2014) and the completely integrated into the natural landscape Macallan whiskey factory in Scotland (2018). His style is also characterized by teamworking (this is a special topic, having to do not only with creativity, but also with management), collaborating with engineers as co-authors of the project — this being his main advantage. This style implies close cooperation with the client, meticulous studying of the needs of the end user, and solving problems jointly with the professionals.

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Another characteristic feature of the master's work has always been his commitment to the ideas of the 'Modern Movement' regarding the importance of the social role of architecture and the architect's responsibility. Rogers writes articles and publishes books on the theoretical problems of architecture, its philosophical and ethical aspects. He was the first architect to deliver a course of lectures called 'Cities for a Small Planet' on BBC. He is a member of the House of Lords representing the Labor Party; he initiated the development of the UK national urban planning policy, renovation projects for London and other cities around the world, and energetically takes part in these activities.

Throughout the many years of his activity, Rogers received almost every prestigious architectural award, including the Pritzker Prize, the RIBA Stirling Prize, the American Institute of Architects (AIA) Gold Medal, the Golden Lion Prize of the Venice Architectural Biennale, the Praemium Imperiale of the Japan Art Association which is awarded for "the achievements and the influence on the art of their country and the spiritual enrichment of the world".

Awarding Rogers with the Pritzker Prize in 2007, the organizing committee gave the following explanation to their decision: "a unique interpretation of the Modern Movement's fascination with the building as machine, an interest in architectural clarity and transparency" [1].

II. THE THEORETICAL GROUNDS

Rogers Stirk Harbour+Partners, the company led by Rogers, got its name in 2007, although architects Graham Stirk and Ivan Harbor have been working in Richard Rogers Partnership company since the mid-1980s. Rogers explained the change of the name: "We wanted to avoid a situation where the name of the practitioner could slow down the development, but at the same time sought to preserve everything has been created throughout 50 years." Today, the company having branch offices in Tokyo, Madrid and Barcelona is located in the Leadenhall Building, the tallest skyscraper in the City of London, built by the company itself, near the legendary Lloyd's Building designed by Rogers, which in 2012 received the Grade I listing in 2012.

Built in 2014, the Leadenhall building received 11 awards, including the National Prize and the London Prize (RIBA) in 2018. Together with the Lloyd's building, it is included in the list of the 50 Most Influential Tall Buildings of the Last 50 Years. The fact that the architectural company RSHP is located in a building constructed by their own design project perfectly reflects the fundamental principles and capabilities of this company and, at the same time, with all its extraordinary novelty, demonstrates the basic concepts that Rogers formulated at the very beginning of his creative career, in the 1969 manifestos [2].

Some points from those manifestos are now thought as necessary conditions for successful work in the architectural profession. But this is due to the many years of Rogers's and his associates' work. It makes sense to list the most important issues addressed in those revolutionary for their time manifestos, and the author's approach to dealing with them. Here are the most important ideas from the first, to greater degree theoretical, of the two manifestos in a brief summary:

- Open up the "rigid system of architectural education" for new ideas and technologies.
- To create design workshops working on the principles of "interdisciplinary interaction of professionals"/
- Design process should be based on communication with the client and the consumer.
- Orientation on contemporary technologies that 'can make study and work more enjoyable and less burdensome for people'.
- The problems of the environment, which is 'mercilessly exploited by the society of capitalist morality' should to be solved not by building static monuments, but by creating transformable buildings that adapt to changing environment.
- The use of "a single shell covering the space for various purposes and places".

Last point was one of the few to be left out in Rogers's further practice. However, the principle of organization of flexible, free spaces, that are easily transformable and adaptable to new consumer needs, however, not under a single shell, is one of the most important principles in his practice. The new methods he proposed for the design and construction of such buildings proved to be successful and demanded.

The second, more rational, manifesto proposed to move on to the creation of a new type of building, which implied:

- using an optimized set of mass-produced standardized elements;
- ensuring the quality and minimizing the construction time by assembling pre-fabricated modules on the site;
- creating as long bays as possible with as few supports as possible to ensure the 'flexibility' of spaces;
- ensuring the availability of production equipment by placing it in special volumes;

- ensuring the designer's supervision, who deals with a qualified subcontractor, and not with the builders.

If we add to this the attitude towards ecology, context and urban environment as a whole, which formed in the 1990s, then the Leadenhall building can be considered a model example reflecting the creed of architect Richard Rogers and his team.

Let's start with the environmental context. Even in his early buildings, such as the Pompidou Center and the Lloyd's Building, Rogers considered it one of his priorities to make the streets in a dense urban built-up environment open, comfortable and 'friendly' to ordinary citizens. Thus, the Pompidou Center, located in the historical center of Paris, was originally intended to be raised above the ground with the lower level space open for people to walk through. In the final version, in order to include all the necessary premises and not to exceed the maximum altitude, only a square for various public activities was left in front of the building. Richard Rogers and Renzo Piano, the authors of the project, believed that it was the main space for the cultural center, from which city life should organically flow into the building. In the Lloyd's building, despite the crowded area of the City of London, the same goal was pursued — to make the street level as accessible and friendly to people as possible. This project, having raised a lot of problems, gave a start to Roger's serious design activity aimed at the revitalization of central London. Courtyards, recreational areas, small shops, and cafes appeared between the main volumes of the building. The unusual image of this office building, thanks to its exquisite sculpturesqueness and the highest quality of steel structures, turned out to be very fitting for the historical business center of London, giving it new modern vibes.

III. THE LEADENHALL BUILDING

The Leadenhall building became the apotheosis of this urban idea, creating essentially a new type of urban space in the middle of the City of London. The huge, 225-meter-tall fifty-story building is elevated above street level to a height of seven floors on powerful steel supports. The space below forms a small covered, but well-lit city square, from which one can use one of the several escalators to go up to the to higher floors with offices, or to galleries with shops and restaurants. The shape of the skyscraper is carefully aligned against the horizon and, as the volume gets narrower as it goes up, it creates a spire, contrasting with the surrounding domes and the nearby cigar-shaped silhouette of Norman Foster's Swiss Re building, revealing, as if staggering back, the view of London's most important building, St. Paul's Cathedral. ("Fig. 1", "Fig. 2").

Fig. 1. The Leadenhall building. Panorama.

The organization of spaces in the Leadenhall building in traditional for Rogers's workshop. The communication unit with utility rooms and toilets is located in a separate unit adjacent to the main building. This principle has many times proved itself useful for replacing outdated technical equipment without interrupting the functioning of the main volumes of the building. All office spaces have as few supports as possible, which allows the tenants to design the layout of their offices according to their own needs. A fantastically complicated engineering solution that made it possible to visually attach the floors, gradually decreasing in depth, to the main shaft, was invented and developed by Rogers' long-time partner, Ove Arup, the largest and oldest engineering and construction corporation in the United Kingdom. A powerful frame of steel structures surrounds the facade from three sides, creating a simple but expressive composition of junctions reflecting the structural logic of the building.

Fig. 2. Square under the Leadenhall building.

Rogers' collaboration with Ove Arup engineers began with the constructive development of the winning project of Plateau Beaubourg. According to Rogers and his co-author Renzo Piano, the project they created was more of a futuristic concept with little hope to ever be realized. To solve this problem, a young talented Ove Arup engineer Peter Rice was invited. He was famous for carrying out the seemingly impossible

task of developing the famous “sails” of the Sydney Opera. Later on, most of Rogers’s projects were developed in close collaboration with this unique company’s engineers, who were focused on creative cooperation with the architect. The world’s best innovative constructions were carried out by this particular company.

80% of the Leadenhall building was assembled from pre-fabricated blocks. Large metal structures were produced at factories across Europe and delivered on site in the center of London precisely on schedule on special platforms. This allowed to complete the construction in an unprecedentedly short time for such a large-scale construction — 11 months. The elements of “maintenance” communication tower were brightly color-coded. Its full glazing allows passers-by to observe the continuous movement of elevator capsules, like children do when they look at the trains running through a toy railroad, creating a “friendly” atmosphere in the business district. ("Fig. 3").

Fig. 3. The communication tower.

Inside the building, comfortable conditions are achieved through the implementation of a high-tech construction of office floors, well-designed heat insulation and ventilation, including special openings in window frames and automatically controlled window-blinds on full-glazed facades. The heat recirculation system in the interframe space developed for the Lloyd’s building, was also implemented here. It is widely used in construction today. The abundant daytime illumination of the inner spaces through an ultra-transparent glass that reflects heat rays and does not glare, and the bright colors create an optimistic atmosphere in the office interiors. The space under the building, sheltered from the rain and beautified, gave the tight business district one more square. The idea to make people’s work more comfortable and enjoyable through high-tech architecture is what immediately comes to mind. ("Fig. 4").

It should be noted that Rogers in his comments on this building emphasized the importance of the client’s and consultants’ active participation both in determining the basic concepts of the building and in the design process itself [3].

Fig. 4. The view from the interior.

Trying to pinpoint the stylistic trends of his time, Charles Jencks in the late 1990s marked that in Rogers' work the high-tech architecture was drifting towards organi-tech. But this was by no means a U-turn, Rogers' principles remained the same, although the looks of some of his buildings really were closer to the organic shapes. These were the courthouse in Bordeaux (1998), the Pudong Airport in Shanghai (2004) and the Barajas Airport in Madrid (2005). In many respects, this was a general trend reflecting the awareness of the rising global environmental and energy conservation issues. At the same time, more advanced technologies and materials introduced in construction allowed to reduce the gravity of these problems, and in the design provided the opportunity to create the optimal, but difficult in implementation unusual “floating” architectural forms with curved and multidimensional surfaces.

IV. CONCLUSION

In each of its many projects, Rogers Stirk Harbour+Partners, which is still led by Richard Rogers (who is already an elderly man, having turned 87 years old this year), persistently confirms the continuity and consistent development of its original principles.

It is obvious that the points of Rogers’s manifesto are being put into practice through the features of all of the reviewed buildings: participation of interdisciplinary groups and the client in the design process; assembling buildings from prefabricated

components; the principle of separation of technological service zones into independent units; "honest" expression of the constructive logic of the building, conveying high aesthetic quality; attention to the environmental context; creating a comfortable environment for people.

When, in 1991, Rogers expressed his creative creed in the book called "Architecture. A modern view", some called him a hopeless utopian, others saw him as an architect prophesizing a distant future. Today it is recognized and well known as one of the pioneers and adherents of the idea of sustainable architecture. The list of his many buildings and awards suggests that his works have significantly changed people's minds, proving that innovative architectural structures can not only exist in harmony with the outside world, but also improve it by solving current problems of the modern world through the use of advanced technologies and the help of the professionals - from sociologists to mathematicians, from engineers to philosophers.

On the occasion of Rogers' 80th anniversary, which was celebrated in 2013, the theorist of architecture Alexander Rappaport wrote on his blog: "Maybe the future will look back on Richard Rogers's tireless search and see something more in him than just the founder of high-tech"[4]. We would like to believe that this time has already come.

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