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# RENZO PIANO MUSEUMS. SKETCH AS SYNTHESIS OF THOUGHT

## MUZEA RENZO PIANO. SZKIC JAKO SYNTEZA MYŚLI

#### Abstract

Renzo Piano believes that freehand drawing gives freedom, it is instinctive, and its imperfection provokes change and continuous improvement. The briefness of the sketch forces us into a synthetic way of thinking and to capture only the essence of things. Based on examples of Renzo Piano's works from different periods, we can observe the evolution of his very personal vision of the museum, his thinking about form, the relationship with the environment, with the audience and finally his approach to issues of natural lighting in an exhibition space.

Keywords: sketch, museum, Renzo Piano

#### Streszczenie

Renzo Piano uważa, że odręczny rysunek daje wolność, jest instynktowny, a jego niedoskonałość prowokuje do wprowadzania zmian i ciągłego ulepszania. Lakoniczność szkicu zmusza do syntetycznego myślenia i uchwycenia istoty rzeczy. Na przykładach autorskich rysunków z różnych okresów twórczości można zaobserwować, jak rozwija się jego bardzo osobista wizja muzeum, myślenie o formie, relacji z otoczeniem, z widzem czy w końcu podejście do kwestii oświetlenia naturalnego przestrzeni ekspozycyjnej.

Słowa kluczowe: szkic, muzeum, Renzo Piano

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Renzo Piano, a Pritziker Prize winner in 1998, designed 25 museums until the year 2014. He is a master in this field. Basing on the examples of Renzo Piano's works from different periods we can observe an evolution of his very personal vision of the museum, thinking about the form, the relationship with the environment, with the audience and finally his approach to issues of natural lighting in an exhibition space. Each time, the sketch was the method of developing the project. Piano believes that freehand drawing gives freedom, it is instinctive, and its imperfection provokes change and continuous improvement<sup>1</sup>. The briefness of the sketch forces us to think in terms of a synthesis and to capture the essence of things. We can also reverse this situation. The sketch is the perfect tool for illustrating the main guidelines of a project in a brief and clear manner. "Renzo Piano argues that freehand drawing is a basic part of the theoretical process of creating architecture. This process begins with the sketches, the next step is a more detailed drawing and the final phase is the model. At times, it happens that the architect goes back to the drawing, starting the process of circulation"<sup>2</sup>.

#### Centre Georges Pompidou, Paris, France, 1971–1977

In 1971, Renzo Piano and Richard Rogers – young, little-known architects – won a competition for the design of a cultural center in the Beaubourg district of Paris, which, after the death of Georges Pompidou in 1974, was named after him. In an era of social revolution, the project was a kind of revolution in the world of architecture. The Centre Pompidou completely changed the relationship between the museum and the audience. It became a meeting place, a melting pot, a container, a machine open to people interested in culture and art. It is also considered the first example of high-tech architecture, which Piano himself denies: "In reality it is quite an ironic building. It is not a real spaceship – it is a Jules Verne spaceship. It's really more a parody of technology than technology. It was just a direct and quite innocent way to express the difference between the intimidating cultural institutions like they normally were in the 60s and 70s – especially in this city [Paris, where his studio is based] – and the modern building, very open and a curious relationship with people. The idea was that it doesn't intimidate. We were young bad boys and we liked that.

But the Beaubourg is not really the triumph of technology. It's more about the joy of life. It's a rebellion"<sup>3</sup>.

In an interview in 1977 Piano notes that the idea was born in the mind, not on paper. "We said to ourselves: 'Let's try and think about this competition. If we get a good idea for it, we'll do it'. And within the first 10 days, we had quite an interesting idea: that of counterproposing, in a slightly controversial vein, the concept of a big contraption, or machine, to that of the large cultural centre – an idea we both had simultaneously. This idea, although it hadn't

<sup>&</sup>lt;sup>1</sup> P. Clemence, *Q & A: Renzo Piano*, http://www.metropolismag.com/Point-of-View/July-2014/QA-Architect-Renzo-Piano/, New York 2014.

<sup>&</sup>lt;sup>2</sup> A. Białkiewicz, *O rysunku architektonicznym*, TEKA Komisji Architektury, Urbanistyki i Studiów Krajobrazowych, Lublin 2006, 53-60.

<sup>&</sup>lt;sup>3</sup> M. Fairs, *Interview: Renzo Piano on The Shard*, http://www.dezeen.com/2012/05/18/interview-renzo-piano-on-the-shard/, London 2012.

been drawn yet, seemed interesting enough to warrant our participation"<sup>4</sup>. Surprisingly, freehand drawings became very important in the construction phase of the project. In an interview Piano complained that the sketches were taken from them in order to construct the building on their basis. "France was terrible. It was a bizarre school [of thought] where being the architect was just a sketch-making job", he says. "They said, 'Merci beaucoup, monsieur, now we'll do it' and we said, 'No you won't. We'll do it"<sup>5</sup>.

One of the Pompidou Center sketches published on the Renzo Piano Building Workshop website is an example of a drawing illustrating the concept after the project had been finished. In the competition entry design, the building was supposed to have 10 levels, 3 underground and 7 levels above ground; in the competition entry design it wasn't a peculiar glass tube with escalators. However, this sketch perfectly demonstrates the most characteristic elements of the front facade: a modular structure with the cross braces, the escalator tube or the piazza recessed in the ground in front of the building.

#### The Menil Collection, Houston, United States, 1982–1986

The Menil Collection houses a private 20th century art collection of Dominique and John de Menil. This is the second Renzo Piano museum (after the Centre Pompidou), his debut as an independent author. It is the first example of Piano's characteristic approach to the use of daylight in an exhibition space. While at the Centre Pompidou the exhibition spaces are almost completely without daylight access, in the Menil Collection design a glass roof was designed, fitted with huge blinds. A conceptual sketch of the building perfectly illustrates Renzo Piano's thoughts on this topic. The painted white blinds are shaped so as to prevent the direct penetration of the sunlight into the interior and give a large amount of diffused light from upwards. The Sketch shows in a synthetic way another important feature of the design – a strict modularity, based on the spacing of the blinds the architect designed for the roof drainage system and the artificial lighting of the interior. In the sketch, we can see a raised floor covering all the installations and also figures of visitors and sculptures, which allows us to evaluate the height of the interior.

#### Cy Twombly Pavilion, Houston, United States, 1992–1995

This monographic museum dedicated to the works of the abstract expressionist Cy Twombly (whose real name is Edwin Parker) was also funded by the Menil family and it is located in the vicinity of the Menil Collection. The design is a further development of the idea of the glass roof, with a slightly different approach to the issue of excessive light exposure. Among the numerous sketches, there is one very simple drawing that focuses on issues of natural light. This fragmentary section highlights a large space between the glass roof and the ceiling made of a translucent fabric that diffuses natural light and reduces its intensity by about 300 lux. The drawing is rather simple, but it contains many descriptions and gives the impression of a quick draft sketch performed in order to solve a specific problem.

<sup>&</sup>lt;sup>4</sup> C. Casati, *The Parisian Hyde Park Corner*, Domus 01/1977, Milano 1977.

<sup>&</sup>lt;sup>5</sup> V. Pitt, *Interview: Renzo Piano*, http://www.building.co.uk/interview-renzo-piano/5044399.article, London 2012.

#### Beyeler Foundation Museum, Riehen, Switzerland, 1992–1997

Beveler Foundation Museum is located in Riehen near Basel. The museum's founder - Ernst Beyeler - insisted that his collection of contemporary art should be viewed in natural light. The glass roof is a little different here than in the previous Renzo Piano projects - it is more modern, with an additional level of saw-tooth-shaped layer made of tempered glass with UV filters, as well as the ability to adjust, to some extent, natural illumination. There are many sketches describing the issues involved in the design of this building. However, one drawing which shows the relationship between the building and the environment caught my attention. The museum is located on the longitudinal plot among many century-old trees in close proximity to the eighteenth-century villa Berower housing museum offices and a restaurant. It is quite a large building, with a length of 127 meters, yet it does not dominate over the area and discreetly blends with a gentle hillside. The museum is not high, the horizontal proportions are achieved due to the fact that part of the exhibition space is located below the ground level. Large areas of glazing in the external walls integrate the interior with the surrounding greenery. One of Piano's sketches shows the context of the museum's park, and also in a very brief way explains the form of the building, its proportions, its glass saw-tooth-shaped roof and its shape based on the direction of the sun

### Jean-Marie Tjibaou Cultural Centre, Noumea, New Caledonia, 1991–1998

The Jean-Marie Tjibaou Cultural Centre was erected as a tribute to Jean-Marie Tjibaou, a New Caledonian leader murdered in 1989. The Center presents an exhibition of the Kanak civilization. On the island of New Caledonia, located on the Pacific Ocean, which had been under the rule of France for many years, nearly 40 percent of the population have European roots. The French government promotes the European lifestyle, threatening the Kanak culture. The Centre is a bridge between modern civilization of the Western world, and the local traditions. Built using the latest technology, the building has a structure which is inspired by local architecture. The form of the building fits perfectly into the landscape of New Caledonia. One of Renzo Piano's sketches of it shows a cross-section of one of the pavilions in the shape of Kanak huts. The drawing describes the air circulation in the interior. The shape of the high wall of the pavilion can be viewed as a shape similar to a sail. It was formed to increase convection and provide efficient interior cooling. Additionally, through the closing or opening of the different holes, the air flow can be controlled with an optimal effect during different wind conditions. This wall has to resist the force of hurricanes which frequently occur on the Pacific Ocean. The presented drawing is probably an early concept sketch because the wall was built in a slightly different shape, in the form of a double facade.

#### Paul Klee Center, Bern, Switzerland, 1999–2005

This museum, located on the eastern outskirts of Bern, contains more than 4,000 works of Paul Klee, with the ability to exhibit 200 of them to the public. In a very modest sketch, we can read the most important inspiration for its design, whose undulating form of the "three hills" refers directly to the landscape surrounding the museum – hills in the foothill region of the Alps, and symbolically shows the artistic personality of Paul Klee, himself being torn between the world of painting and music, an innovative approach to the concepts

of tension and dynamics in art, fascination with the intuitive art of children, or graphic forms of the Arabic alphabet. The attention is drawn to the huge spiral that highlights the entrance area which appears sometimes in Renzo Piano's drawings. The drawing enchants with its simplicity and accuracy in showing the architecture of the museum. It seems that the undulating form of the building is ideal for searching for the ideal curvatures using freehand drawings.

#### Chicago Art Institute - the new wing, Chicago, United States, 1999-2009

The new wing of the Art Institute of Chicago houses collections of modern European art. It is located in Grant Park – a large green area on the Lake Michigan shore. The old part of the Institute was founded in 1893. The addition was built on the east side as a light and transparent new wing which is to emphasize the elegance of the limestone-clad old building. Renzo Piano comes back to the idea of the glass roof – again in a slightly different way. The roof of the new section of the Chicago Art Institute, called the "flying carpet", seems to float above the main body of the building. Beneath it there is a large space for ventilation. This is shown on an original Renzo Piano sketch, on which he also analyzes the influence of different sunlight angles on the building oriented on a north-south axis. As in the case of the Paul Klee Centre, the huge spiral highlights the new entrance on the side of Monroe Street. The drawing also shows the details of the design, such as vertical blinds to protect the facade, the context of the park and of the lowering of the terrain, in which the railway tracks are located.

#### Kimbell Art Museum – extension, Fort Worth, United States, 2007–2013

The design and construction of the Kimbell Art Museum extension is a kind of multidimensional conversation between Renzo Piano and Louis Kahn - the author of the older part of the Kimbell museum, which was completed in 1972. At that time (during the years 1965–1970), which was at the beginning of his career, an unknown Piano worked with Kahn. We can notice some similarities between both sections of the buildings in their scale, their height, proportions or the rhythm of their form. Kahn and Piano share a similar approach to the use of indirect natural light and the way of reaching a proper solution through numerous sketches. The part designed by Piano is "lighter" and more transparent. One of Renzo Piano's sketches shows the main foci of the concept, developing the concept of the glass roof. In this design, as in The Menil Collection, some of the technical infrastructure serving the exhibition is hidden under the raised floor. The sketch heavily accents double beams made of laminated wood - the main element of the roof structure. This drawing also shows details such as the inner membrane diffusing the natural light, artificial lighting systems and elements of the roof drainage. The Kimbell Art Museum project is a kind of bracket joining the beginnings of Renzo Piano's career with the present and it contains a wealth of his thought on the nature of the museum.

Agata Bonenberg, who worked with Renzo Piano for over a year, reports that according to him, "the advantage of the freehand sketching method is the ability to quickly take note of the creative thought and its importance"<sup>6</sup>. This proves Renzo Piano's appreciation

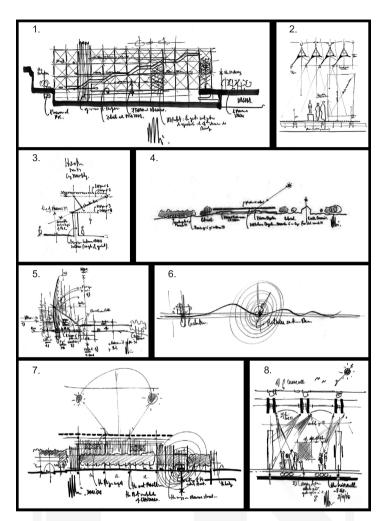
<sup>&</sup>lt;sup>6</sup> A. Bonenberg, *Techniki reprezentacji architektonicznej a jakość przestrzeni współczesnego miasta*, Czasopismo Techniczne, 6-A/2008, 256-261.

and use of sketches in the early stage of a design. However, Agata Bonenberg adds, that "the master freehand sketches contain the essence of the design concept. Looking at them, we understand the meaning of the project faster than analyzing the CAAD drawings"<sup>7</sup>. This statement suggests that the sketches are created as a part of a concept's explanation, made in a later phase of design or even after it has been finished. Often it is the case that the sketch becomes an independent piece of art. In times of computer-aided design and 3D modelling, the sketch remains the best way to record an architect's thoughts.



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<sup>&</sup>lt;sup>7</sup> Ibidem.



- Ill. 1. Centre Georges Pompidou, Paris, France, 1971–1977 (copyright Renzo Piano Sketches)
- Ill. 2. The Menil Collection, Houston, United States, 1982–1986 (copyright Renzo Piano Sketches)
- Ill. 3. Cy Twombly Pavilion, Houston, United States, 1992–1995 (copyright Renzo Piano Sketches)
- Ill. 4. Beyeler Foundation Museum, Riehen, Switzerland, 1992–1997 (copyright Renzo Piano Sketches)
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- Ill. 6. Paul Klee Center, Bern, Switzerland, 1999–2005 (copyright Renzo Piano Sketches)
- Ill. 7. Chicago Art Institute a new wing, Chicago, United States, 1999–2009 (copyright Renzo Piano Sketches)
- III. 8. Kimbell Art Museum extension, Fort Worth, United States, 2007–2013, Source: www.rpbw. com, www.fondazionerenzopiano.org (copyright Renzo Piano Sketches)

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