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## ARCHITECTURAL DRAWING – ILLUSTRATING THE ELEMENTS OF THE INVENTED WORLD

### RYSUNEK ARCHITEKTONICZNY – OBRAZOWANIE ELEMENTÓW ŚWIATA WYMYŚLONEGO

#### Abstract

An architectural design is still the main means of artistic expression in illustrating the elements of the world invented by architects. For the last two decades this elementary way of expressing artistic intentions has been consequently replaced by new devices – a computer and software which enable digital modeling of the designed objects. This phenomenon proceeds mainly in the issues connected with presenting an architectural idea, so that it concerns the analyses that finish the artistic process of an object designed. Even at the level of competitions more and more often visualizations and not the drawings of an object are becoming the obligatory element of the work submitted. The article discusses today's role and importance of an architectural drawing in the artistic process and architect's artistic workshop.

*Keywords: architectural drawing, illustrating, record, presentation of an idea*

#### Streszczenie

Rysunek architektoniczny pozostaje wciąż podstawowym środkiem wyrazu artystycznego w obrazowaniu elementów świata wymyślanego przez architektów. Przez ostatnie dwie dekady ten elementarny sposób przekazywania intencji twórczych jest konsekwentnie wypierany przez nowe narzędzia – komputer i oprogramowanie, pozwalające na cyfrowe modelowanie projektowanych obiektów. Zjawisko to postępuje zwłaszcza w kwestiach związanych z prezentacją idei architektonicznej, a więc dotyczy opracowań wieńczących proces twórczy projektowanej rzeczy. Nawet na etapie konkursów coraz częściej to wizualizacje, a nie rysunki obiektu stają się obligatoryjnym elementem zakresu składanej pracy. W artykule przybliżono dzisiaj rolę i znaczenie rysunku architektonicznego w procesie twórczym i warsztacie architekta.

*Słowa kluczowe: rysunek architektoniczny, obrazowanie, zapis, prezentacja idei*

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“The best graphic artist may be a weak architect. The best architect may be a weak graphic artist. While choosing an occupation of an architect one should be graphically talented. Our whole new architecture was invented at the drawing board and the pictures drawn this way are presented artistically, similarly to the paintings in panoptikum”<sup>1</sup>.

Adolf Loos, *Architecture*, 1910

“An architect (...) shall know the drawing in order to easily create the picture of intended work of art with the use of sketches”<sup>2</sup>. A lot of beginners in architecture met these words by Marcus Vitruvius Pollio from the work *De architectura libri decem* at the beginning of their career. The drawing is the basic skill, although just one among many others, which is necessary, according to Vitruvius, in trying to reach “the top of the temple of architecture”. This pragmatic statement carries the essence of the aim of the art of drawing in the architect’s job – it is the ability to illustrate the elements of the world invented by the artist. This ability to present the idea of the work of art has become not only a form of communication with masters of building craftsmanship but mainly an element of the job which allowed to present and explain the suggested design solutions in order to persuade the patronage to execute artistic intentions. Those who mastered and brought this ability to the level of art many times gained the titles of masters and became authorities in the area of architecture. Nowadays, it seems that this situation has changed a lot. Although freehand drawing is still the main means of artistic expression it has been consequently displaced by new devices such as a computer and software enabling digital modeling and visualizing of a construction designed.

In the years 2011–2013 a small Museum of Architectural Drawing in Berlin run by Tchoban Foundation was built in the area of old Pfefferberg industrial building (the author: SPEECH Tchoban & Kuznetsov). This museum owns a collection of both old works, coming from the 16<sup>th</sup> century, and modern works by architects from the 20<sup>th</sup> and 21<sup>st</sup> centuries. One of the aims of this initiative was “to revive the interest in architectural drawing”<sup>3</sup>. The crisis in hand drawing architecture putting emphasis on an author’s study of an object designed is confirmed by creating such kinds of modern buildings – institutions. It induces further reflection on today’s role and importance of architectural drawing not only in the artistic process and workshop of an architect but also in accordance with modern ways of presentation of architectural works in which drawing is more often displaced by new computer technology.

It seems that only two decades were enough to popularize computer methods of modeling and visualizing objects in order to marginalize centuries-old role and importance of architectural drawing in illustrating invented buildings. This phenomenon proceeds dynamically mainly in the issues connected with presentation of an architectural idea, so it concerns individual study finishing artistic process of the designed object. A drawing

<sup>1</sup> A. Loos, *Architektura*, 1910, [in:] A. Loos, *Ornament i zbrodnia. Eseje wybrane*, translated by A. Stępnikowska-Berns, Fundacja Centrum Architektury, Warszawa 2013, p. 147.

<sup>2</sup> Witruwiusz, *O architekturze ksiąg dziesięć*, translated K. Kumaniecki, Prószyński i S-ka, Warszawa 2004, pp. 24-25.

<sup>3</sup> P. Olszewska, *Rysunki na Pieprzowej Górze*, Architektura & Biznes, nr 7/8, 2013, pp. 70-73.

that illustrates the final vision of an architectural thing becomes a niche phenomenon in the professional practice. This ongoing process dominates even at the stage of settling architectural competitions in which more often computer visualizations of a building and not drawings by hand become an obligatory element of a work submitted. Gradual abandoning hand drawn architecture seems to marginalize artistic ethos of an artist – architect, whose job has been perceived until now as an occupation connected with liberal arts. The masters of Renaissance such as Federico Zuccari (treatise *Ideas of painters, sculptors and architects*, 1607) strived for such an image propagating the idea of the term *disegno*<sup>4</sup>. Not without reason a triad of the visual arts, painting, sculpture and architecture, was determined then as *arti del disegno*, i.e. “drawing arts”. It should be notified that the architect’s profession, though including a lot of branches and abilities, in ancient times did not gain the range of “liberal art”. Władysław Tatarkiewicz writes about it in his work *Historia estetyki*, “High education was required from an architect by ancient theoreticians – but nevertheless they did not decide to treat his work as liberal art. Cicero (...) considered architects to be ordinary artificers, peons who are the opposites of educated men, studios excellentes”<sup>5</sup>.

Nowadays, architecture drawn by hand often finishes its existence at the stage of architectural education as a necessary cognitive element in teaching process. The art of drawing the architecture in further professional practice seems to limit its existence to sketches that present only creative process of thought and show the forms of intended works in succinct way – sometimes they present some lines – a record of the intentions of the author. It is seen in specialist publications, architectural output exhibitions and studies presenting the ideas of projects – sketches are dominant. Only a few architects representing the new generation of architecture artists cultivate tricks of “old school” and present artistic character of object through original drawings by hand. This phenomenon extends with the increase of accessibility of new technologies supporting the designing process. It often leads to a kind of professional pathology – limitation in architectural output to creating the works based only on technical drawings which do not present the essence of design issue – the image of a building, and Janusz Krupiński pays attention to it by writing, “Unfortunately we often deal with architects who work only at the level of a technical drawing. Such drawing relates to a building and not the image of a building. Some authors have enough imagination to imagine the final result... But if they are victims of a functionalist doctrine which disregards, negates the importance of a building image, they do not have any need to see the form of a building – from the user’s perspective. Will computer programmes, virtual reality technique replace imagination? Which *disegno* are they created with?”<sup>6</sup>.

<sup>4</sup> F. Zuccari, *Idea malarzy, rzeźbiarzy i architektów*, 1607, [in:] *Teoretycy, pisarze i artyści o sztuce. 1500–1600*, chosen and worked out by J. Białostocki, słowo/obraz/terytoria, Gdańsk 2007, pp. 386-401.

<sup>5</sup> W. Tatarkiewicz, *Historia Estetyki*, v. 1, Arkady, Warszawa 1988, p. 253.

<sup>6</sup> J. Krupiński, *Disegno. Renesansowa idea disegno jako teoria estetyki świata*, *Estetyka i krytyka*, 7/8 (2/2004-1/2005), UJ, Kraków 2005, p. 57 (look: a footnote nr 16), [in:] [http://www.krupinski.asp.krakow.pl/index.php?page=docs/disegno...teoria\\_estetyki.htm&type=teksty](http://www.krupinski.asp.krakow.pl/index.php?page=docs/disegno...teoria_estetyki.htm&type=teksty). J. Krupiński also wrote about this issue in the text: *Funkcjonalizm, zapoznana kategoria obrazu*, *Architektura & Biznes*, nr 6, 2002, pp. 68-73.

It seems that an architect's occupation, thanks to modern devices and computer technology development, is going to enter a new stage of development which has been unavailable so far. From now on an author's drawing will be gradually replaced by pictures generated by specialist programmes supporting the process of designing. Nowadays BIM software (*Building Information Modeling*) is being introduced. It enables to model the structure of a construction and determine at the same time its functional and physical parameters reflecting their real features in digital recording of an area. An unavoidable phenomenon is gradual transferring an artistic process into virtual reality presented in digital version without author's participation – a drawing by hand which crowns the designed work. Tools and media are changing, the essence of creating – *internal disegno* – remains. It will turn out in the future to what extent it will be a natural process of evolution of this profession, changing only the way of illustrating an architectural construction and being the source of a need of an original presentation of a building form, and to what extent it will be a process forced by obligatory market or legal conditions dictated by economic rationality of designing process. Then, may the pleasure of drawing an invented architectural construction be replaced by the pleasure of visualizing it in virtual reality? It does not depend only on an author but also on a receiver – a sponsor who also notices an exceptional and unique quality in this architectural craftsmanship. Paradoxically software that converts designed virtual reality into a form of presentation – an imitation of a drawing – has been invented. It confirms that there is a further need to create drawing architecture even in virtual reality.

Up to the end of 19<sup>th</sup> and the beginning of 20<sup>th</sup> centuries an architectural drawing became such a dominant element in an architect's workshop that this profession started to be associated with the profession of an artist – a graphic designer of architecture, and not with its creator – a builder. Adolf Loos pays attention to this fact in his essay *Architecture* (1910) focusing on the real use of this ability and demanding to treat the drawing as a means to achieve the goal which is architecture, just like it was in the past. A. Loos writes, “Art of building has come closer to the level of graphic art. Not the one who can build well lands the contract but the one whose works look the best in paper form. And these are antipodes”<sup>7</sup>. And further he talks about the importance of drawing in an architect's work. “For old masters a drawing was only a means that made it easier to communicate with a craftsman. Like in the case of a poet – for him the means of expression is the written word”<sup>8</sup>. Loos also explains the differences between illustrating architecture with the use of drawings and the essence of authenticity of experiencing the realised building. He writes, “It is getting really awful when an architectural drawing, which must be considered as an art because of the way of its presentation – and there are a lot of artists of graphics among architects – so it is really terrible when this drawing is realised in stone, iron or glass. The sign of authentically experienced building is the fact that it does not make any impression when it is on the surface”<sup>9</sup>. Rationalistic attitude to the occupation presented by Loos treats drawing architecture as a means to picture the creator's invention. The final form, a realised building, gives an

<sup>7</sup> A. Loos, *op. cit.*, p. 147.

<sup>8</sup> *Ibidem*, pp.147-148.

<sup>9</sup> *Ibidem*, p. 148.

authentic complete impression in experiencing an element of material culture. Heading for synthesis in the recording of a picture of an invented architectural construction, just like it was in the case of painting, soon became a basis to abandon historicizing, figurative forms known from the past and to develop trends of abstractionism which form the bases for new aesthetics in modern art.

While analysing the 20<sup>th</sup> century output of drawing architecture it makes you think that it was the last age in which the skill to show work with the use of a hand drawing was a key element of an artistic presentation carrying substantial marks of individualism and authenticity of artistic work. With the coming of the new millennium a significant departure from freehand drawing techniques is noticed in practical activity of architects. They started to use computer made visualizations of buildings. It happens even while presenting a final picture of a designed building which shows an emotional relationship of a creator with an invented work and displays his subjective opinion about the character of a construction.

A drawing by hand, for ages of its existence, has not only been a unique illustration of an artist's intention but also a presentation of an architectural area, which is at the same time an element creating an expression of architect's artistic identity. We may mention here some people from the world of architecture, for example G.B. Piranesi, K.F. Schinkel, Le Corbusier, E. Mendelsohn, M. Botta, A. Rossi, J. Hejduk, L. Krier, Z. Hadid, M. Scolari or L. Woods and on the basis of their way of illustrating the elements of the invented world we may notice the originality and artistry of "artistic mannerism" which is a sign of a peculiar "style" of an architect. He may be identified through his creative output – a drawing. Technological imperative of devices supporting the process of designing made an artistic act be more a technical activity than artistic one. An architect more often becomes not a graphic artist of architecture but a graphic designer using specialist software which makes it easier to present an artistic work. The art of presenting the invented work has never been changing its form so rapidly and quickly before. Still undeniable is the importance and value of drawing architecture in the teaching and cognitive process for the trainee graduates of this art. Also, in the case of theoretical works, the role of drawing seems to be prominent in the presentation of rules and artistic ideas. There is also a pleasure to draw architecture; it exists just for the pleasure of creating the pictures of architecture, often abstract, irrational or surrealist. Publications by Maria Misiągiewicz *About the presentation of the architectural idea*, and by Leszek Maluga *Autonomous architectural drawings* discuss this subject.

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