# TECHNICAL TRANSACTIONSCZASOPISMO TECHNICZNEARCHITECTUREARCHITEKTURA

4-A/2015

#### BEATA MALINOWSKA-PETELENZ\*

## DRAWING - THE ART OF PORTRAYING SPACE

# RYSUNEK – SZTUKA PORTRETOWANIA PRZESTRZENI

#### Abstract

Drawing is the easiest language to communicate. It is the fastest and most personal way to write down fleeting thoughts, creative plans, ideas, impressions, or momentary revelations. It is also a tool needed for shaping sensitivity – a long-lasting process, irreplaceable with any computer. This sensitivity is needed to read works of art. Architectural masterpieces are also read through images - while images are captured in our memory with drawings. The author reflects on the role of drawing in recording and memorizing space in all of its scales: from the landscape interior to the architectural detail.

Keywords: drawing, sketch, recording space, memory

#### Streszczenie

Rysunek jest najprostszym językiem porozumiewania się. To najszybszy i najbardziej osobisty sposób zapisu ulotnej myśli, twórczego zamysłu, idei, wrażenia czy chwilowego olśnienia. To również narzędzie potrzebne do kształtowania wrażliwości – wieloletniego procesu, którego żaden komputer nie zastąpi. Ta wrażliwość potrzebna jest do odczytywania dzieł sztuki. Dzieło sztuki architektonicznej również czytamy poprzez obraz – obraz zaś utrwalamy w pamięci właśnie za pomocą rysunku. Refleksje autorki dotyczą roli rysunku w zapisywaniu i zapamiętywaniu przestrzeni we wszystkich jej skalach: od wnętrza krajobrazowego aż po architektoniczny detal

Słowa kluczowe: rysunek, szkic, zapis przestrzeni, pamięć

<sup>\*</sup> Ph.D. Arch. Beata Malinowska-Petelenz, lecturer, Institute of Urban Design, Faculty of Architecture, Cracow University of Technology.

Drawing is the art of communicating without words, quick transmission of information, it is also a way to write down a creative plan, a vision, an idea or a momentary revelation. For architects, a drawing can be either a presentation of reality or a vision of a design, as well as a whole range of intermediate states - a fascinating record of the evolution of a design: from the first idea to the finished work.

Drawing and sketching skills, so desirable at the departments of architecture, are, little by little, being replaced with computer graphics programs. Drawing has simply become unnecessary. Students, especially the younger ones, feed on this illusory thesis, fascinated by the machine-generated smooth, hyper realistic images. Young people escape from a pencil, pen and paper, from a systematic exploration of form, it is clearly noticeable already in the first year of study, during design classes. Yet sketch – as we continue saying during each course – is the fastest, easiest and cheapest language of communication between a developer and a client, as well as all professional groups involved in the design process.

### *The basis of art and all of its hand creations was drawing and painting* (C.Cennini, *Il libro dell'arte*)

Drawing, as a means of human expression, was born in the secret caves of the prehistoric era, partially covered with darkness. The most outstanding examples of this original art can be seen in the caves of Altamira near Santander in northern Spain and the Lascaux caves near Montignac, France.

Architectural sketching gained the status of an autonomous work of art rather late, in the 2nd half of the twentieth century. However, already Vitruvius, having developed the knowledge of Greek philosophers, was the first to allude several times to the subject of freehand drawing used in the work of designers.

Roman painting occasionally includes perspective approaches to architectural objects and landscape elements. In the era of great cathedrals, there was an intensive development of drawing, while the position of architects – no longer anonymous – significantly rose in the social hierarchy due to their possession of technical knowledge which was completely incomprehensible to the public<sup>1</sup>. Builders and funders often etched their names on round stone slabs placed on the axis of the nave of a cathedral. The famous sketchbook of Villard de Honnecourt, a builder from Picardy, is still an invaluable source of knowledge of architecture, engineering and natural issues.

The revolutionary invention by Brunelleschi and Alberti of the scientific instrument called perspective allowed drawing to enter the third dimension, become a logical representation of the visible world and develop into a precise system of design presentation. In the sixteenth century, the name "plastic arts" or "fine arts" was not yet in use. The great triad of painting – sculpture – architecture was referred to as the "arts of drawing" – arte del disegno, as mentioned by Vasari in his *Lives of the Artists*<sup>2</sup>. He concluded that "drawings

<sup>&</sup>lt;sup>1</sup> A. Białkiewicz, *O rysunku architektonicznym*, Teka Kom. Arch. Urb. Stud. Krajobraz. – OL PAN, 2006, p. 54.

<sup>&</sup>lt;sup>2</sup> W. Tatarkiewicz, *Dzieje sześciu pojęć*, PWN, Warszawa, 1988, p. 27.

are nothing more than the expression and visualization of the idea you have in your mind, or the one that someone else invents and produces according to their idea", and Alberti stated that architectural drawings are not just collections of individual lines, but ,above all, works of minds expressed using these lines<sup>3</sup>. The position of drawings among the great theorists of the Renaissance: Alberti, Brunelleschi, Leonardo and Cennino Cennini, was incomparably higher than in the Middle Ages. "Disegno" was not just a drawing but rather a complex record of a creative idea originated in the mind of an artist. Władysław Tatarkiewicz mentions that Cennini's disegno is "an active element of art" having "its source not in the object but in the subject, in the artist, in his project, design, idea, concept"<sup>4</sup>. Federico Zuccari, a Mannerist art theorist, accurately distinguished between the "disegno esterno", the external drawing: a material basis of works, a line on paper ("body" of the drawing) and the "disegno interno" – the internal drawing: the idea of the artist it contains ("soul" of the drawing). Albrecht Dürer writes about perspective drawing and proportions of the human body<sup>5</sup>.

#### **Do not take photos, draw! Sketches remain etched in the mind** (Le Corbusier 1927)

The complexity of the relationship between the creation and perception of architecture is associated not so much with the registration of reality, but mainly with the ability to choose and combine different images into a spatial whole. Drawing is the best lesson of looking and learning how to tame space. Biographies of great artists include traveling and stays in important artistic centers that became turning points in their work. Alberti went to Rome to check out antique buildings, and Vasari, writing his *Lives of the Artists*, had to cross the whole of Italy to see the work of its heroes. The mania of travelling – Grand Tour – which was born among the British aristocracy in the seventeenth century and was popularized by the often less prosperous Romantics in the nineteenth century, allowed them to understand how great is the educational value of observation. Bogdan Paczowski writes about the phenomenon of learning, watching and memory in an unusual paper entitled *Grand Tour*<sup>6</sup>.

A travelling architect, currently equipped with a camera and - increasingly rarely, unfortunately - a sketchbook, as a visual aid, gathers material to create own "memory library". A kind of information storage for all scales - from the open landscape, through urban interiors, architecture, through to details. The process taking place between the eye, brain, hand and a piece of paper is the same when drawing the panorama of Salzburg, a street interior in Chartres and details of the west portal of the cathedral in Reims.

"Sketching is the easiest way of noting the observed, said or imagined body or an interior with only a few lines, backed up by a note or a highlighting, enriched with a character,

<sup>&</sup>lt;sup>3</sup> W. Tatarkiewicz, *Historia estetyki*, t. III, PWN Warszawa 2009, p. 111.

<sup>&</sup>lt;sup>4</sup> *Ibidem*, p. 42.

<sup>&</sup>lt;sup>5</sup> Two treatises by Dürer were published in the period 1523-28: *Nauka o mierzeniu* and *Cztery księgi o proporcjach*. They were the result of his many years of study and the basis of science of painting.

<sup>&</sup>lt;sup>6</sup> B. Paczowski, Zobaczyć, Gdańsk 2006.

so as to obtain a drawing being a simple, clear record of thoughts"<sup>7</sup>. Although sketching is not entirely a self-conscious process, but something of a creative discharge, drawing is a perfect medium, as a way of notation and documentation, but primarily, a method of intellectual concentration. Thus, recording travel experiences is an elementary and essential tool needed to shape sensitivity to the beauty of the city in all its scale. It generates continuous and secondary "experiencing" of the site, it perpetuates its memory to the extent allowing synthetic reproduction after years. A memorized image is a capital of experience, to be used in the future, realizing our architectural activity in all phases of the design.

Reproducing the world, in the landscape, urban, architectural and detail scale, is never a mechanically constructed model. Each of these spaces of memories is deeply filtered, processed and sometimes distorted by "instruments" that deform it, the eye, brushes, pens, pencils or even sticks. "Drawings can lie, cheat, like an illusion of photography or a poem. In every respect it is therefore equal to the speech and, as language, needs to be studied"<sup>8</sup>. This is particularly subjective, emotional information about the impressions gained by the author of the image by watching the slice of life.

To this day, we have been learning from the drawings by Stanisław Noakowski, characterized by terse and concise presentation of the topic, the selection of relevant details and some distortion or deformation. Wiktor Zin captured the overlooked or lost beauty in his frames, raised the awareness of the value of landscape, creating fascinating drawings in the presence of audience. Just like Franciszek Starowieyski, when he created his large-format *Theater of Drawing*<sup>9</sup>. Mention must also be made of the memorable drawings of Jan Knothe, whose influence on the shape of post-war architecture in Warsaw was invaluable, including his perspectives, an excellent document for the construction of the MDM district of Warsaw and the WZ expressway. Drawings and sketches are also an important part of the work of Andrzej Wajda who has traveled all his life with a sketchbook, and his "visual notes"<sup>10</sup> often inspired his film images.

#### It's not my intention to revive French art. I struggle with unfortunate paper that did nothing wrong to me, and on which, believe me, I do not do any good. (H. de Toulouse-Lautrec)

Today, drawing is still one of the means of communication – used in the areas of contemporary visual arts, from fields such as architecture, painting, sculpture, design and scenography, ending with graffiti, multimedia works or film art. Drawing "easily assimilates with other forms of expression, giving them a specific, clear, substantial form"<sup>11</sup>.

<sup>&</sup>lt;sup>7</sup> P. Patoczka, Uwagi o rysowaniu wnętrz krajobrazowych, PK, Kraków 1999, p. 4.

<sup>&</sup>lt;sup>8</sup> Ibidem, p. 3.

<sup>&</sup>lt;sup>9</sup> M. Misiągiewicz, O prezentacji idei architektonicznej, Kraków 2003, p. 85.

<sup>&</sup>lt;sup>10</sup> http://www.artbiznes.pl/index.php/rezyser-rysuje-wystawa-prac-andrzeja-wajdy-w-kazimierzudolnym/ (access: 11.02.2015).

<sup>&</sup>lt;sup>11</sup> M. Ryczkowska, Rysunki, Notatki wizualne, szkice – pierwotny sposób uwieczniania świata, http:// magazyn.o.pl/2014/marta-ryczkowska-rysunki-notatki-wizualne-szkice/2/ (access on: 12.02.2015).

Customarily, drawing is seen as a transitional stage, the nucleus of work seeking its final form. Most movies, after the script stage, are first created on a sheet in the form of a storyboard, a rough draft of each scene. Similarly, the creative team of a marketing agency organize their work with ads drawing a shot after a shot of advertising scenes. On the basis of such a storyboard, among others, clients decide whether to start production or not. Architectural sketches can also serve as the first visual expression of the foundation of the finished work.

However, drawings may be finite, autonomous works, self-creations taking recipients into their unique quasi-fiction world, preaching to seek shapes, thoughts, impressions and experiences hidden in the tangled lines. The power of drawing, sketching is the fact that even the humblest is the first record, the prologue, the initial wording of ideas, beginning of thoughts, making a note of information that precedes works created using other techniques.

Sketching is an intimate part of the process of creating, and the line and its expression strongly illustrate the figure and character of the creator<sup>12</sup>. Outstanding examples are the conceptual sketches by Renzo Piano, Zaha Hadid and Alvaro Siza – quick, emotional, nervous, sometimes rough, revealing the skeletal structure of the world. According to Piano, drawing is a "clear instrument" in the cyclic process of thinking and acting<sup>13</sup>. The sketches of Frank Gehry, showing a composition of mounting blocks, created using one undulating line, in a characteristic way enclose the form, exposing its wealth, even its Baroque style. And the laconic notes of Oscar Niemeyer consistently correspond to the characteristic search for pure forms.

## I address the old-fashioned theme of sketching, or quick recording the places known and experienced. Old-fashioned in the period of computers and functional illiteracy of drawing

(K. Kucza-Kuczyński)

With these words the well-known architect, a professor and an eminent cartoonist, started, in the bi-monthly magazine entitled ARCH<sup>14</sup>, a discussion on sketching – the dying art of quick recording of space. It is hard to disagree with this frustrating thesis – drawing has become an uncomfortable, an extremely expensive way to get an index to study architecture. A few decades ago, learning to draw was based on the old, tried and painstaking methods of reaching proficiency in drawing. They consisted, among others, in continuous training of the hand and eye – apart from drawing from nature, memory and imagination, as well as copying the works of the great masters, performing hundreds of better and worse sketches, striving for mastery and the sense of scale and proportion. Today students of the first year, immediately after their drawing courses, absolutely reject

<sup>&</sup>lt;sup>12</sup> D. Kronowski, Rysunek odręczny w projektach mistrzów na przykładzie architektów Le Corbusiera i Zahy Hadid, Przestrzeń i Forma '14, p. 268.

<sup>&</sup>lt;sup>13</sup> A. Asanowicz, Szkic – język projektowania architektonicznego, Zeszyty Naukowe Politechniki Białostockiej, Architektura, zeszyt 21, 2008, p. 12.

<sup>&</sup>lt;sup>14</sup> K. Kucza-Kuczyński, *Szkicowniki*, ARCH no. 3 (17), 2013, p. 116.

the paper, pencils and sketchbooks, bringing computers to design classes. Marcin Brataniec rightly sees the source of this in the constant rush and lack of time<sup>15</sup>. Undoubtedly – to transfer a piece of reality, emotions, a fleeting thought or a momentary revelation onto the paper – you have to stop, calm down, let the stimuli reach the brain slowly, and then be transferred to the image, which requires a great deal of effort and fortitude. It also requires courage and overcoming shame, it teaches humility, discipline and precision.

Computer graphics capabilities have badly weakened the interest of students in hand drawing within architectural design. The result of this process are adjustments made already in the first phase of design such as the use of laptops and tablets. And yet, all phases of designing require constant drawing of the forms and structures of space<sup>16</sup> and only such a process can be considered a universal method of teaching both at the university and in professional practice. Hyper-realistic visuals and simple freehand sketches should not be competitors but ought to complement each other, although only the latter show the personality, sensitivity and temperament of their creator.

Drawing and sketching. Constantly striving to tame the world, a few economical movements, freedom of gesture, intensity of experiencing, emotions and passion – this is the whole wealth of drawing. These are the things that computer will never replace.



Ill. 1. Strasbourg (drawn by Beata Malinowska-Petelenz)

<sup>&</sup>lt;sup>15</sup> M. Brataniec, *Szkice-analogowe podziemie: rysunki z podróży*, ARCH, nr 18/2013, p. 112.

<sup>&</sup>lt;sup>16</sup> M. Fikus, *Przestrzeń w zapisach architekta*, Poznań-Kraków 1999, p. 27.



Ill. 2. Venice - marketplace (drawn by Beata Malinowska-Petelenz)

## References

- [1] Białkiewicz A., *O rysunku architektonicznym*, Teka Kom. Arch. Urb. Stud. Krajobraz. OL PAN, 2006.
- [2] Malinowska-Petelenz B., *O rysunku sztuce zapisywania przestrzeni*, [w:] *Definiowanie przestrzeni architektonicznej*, Kraków 2013.
- [3] Fikus M., Przestrzeń w zapisach architekta, Poznań-Kraków 1999.
- [4] Misiągiewicz M., O prezentacji idei architektonicznej, Kraków 1999.
- [5] Patoczka P., Uwagi o rysowaniu wnętrz krajobrazowych, PK, Kraków 1999.
- [6] Tatarkiewicz W., Historia estetyki, t. III, Warszawa 2009.