

BEATA MAKOWSKA*

ARCHITECTURAL SKETCH AS AN AMBIGUOUS INTERACTIVE GAME

SZKIC ARCHITEKTONICZNY JAKO WIELOZNACZNA INTERAKTYWNA GRA

Abstract

The experience of playing during the process of drawing alters our mode of thinking. Then the resulting interaction between the drawing and the author is helpful in developing his working methods and creativity, discovering new truths, stimulating the production of more design alternatives. It can be a kind of individual game or others can participate in it, influencing the presentation and its truth.

Keywords: architectural sketch, freehand drawing, architect's professional skills

Streszczenie

Doświadczenie gry w trakcie szkicowania zmienia nasz sposób myślenia. Powstająca wtedy interakcja między rysunkiem i autorem jest pomocna w rozwijaniu jego metod pracy i kreatywności, odkrywaniu nowych prawd, tworzeniu większej liczby alternatyw w projektowaniu. Może być ono rodzajem gry indywidualnej lub mogą w niej brać udział inne osoby, co ma wpływ na sposób prezentacji i jej prawdziwość.

Słowa kluczowe: szkic architektoniczny, rysunek odręczny, warsztat architekta

* Ph.D. Arch. Beata Makowska, Division of Freehand Drawing, Painting and Sculpture, Faculty of Architecture, Cracow University of Technology.

(...) any form of game consists of it being played. The charm of the game, the fascination it exerts, consists precisely in the fact that the game masters the players [5, p. 125].

1. Introduction

We start to create architectural forms by sketching. This long lasting process of design becomes a serious form of play, sometimes recorded only on paper and not completed by the building of the form. The experience of playing during the process of drawing alters our mode of thinking [10, p. 32]. It opens up new sources of inspiration and allows a breaking with conventional ways of solving a design problem. It supports and develops cognitive activities in design, which are mainly carried out and developed by drawing and then interpreting and analysing the images [4, p. 3]. Freehand drawings “help to channel the vague ponderings of the mind into visual images of a germinating concept” in this gameplay [9]. The quick and ambiguous drawings start “(...) a process of abstraction that produces unexpected forms. These undefined forms can encourage manipulation and transformation” [12, p. 91]. They give the opportunity for a quick and multiple glance at the different alternatives which are created. The repetition of the sequences of sketches “(...) infused with different scenarios, reveals the play factor in learning” through problem solving [12]. The ambiguity of such freehand drawings “(...) allows multiple interpretations and thus stimulates the production of more design alternatives” [4, p. 1]. Sketching becomes an interactive game in the search for new paths in design, new ‘open gates’ for the imagination.

There are several variants of the drawing game. At least two people can participate in it – when a drawing is shown to someone (an expert or a person outside the architectural profession). It can also be a kind of individual game in which the author forgets about the co-players-observers, focusing on the essence of a sketch – the depiction of ideas and the search for the best solution. In the first variant, in addition to the drawer, there is the player-observer (or even a few players), interaction occurs between them, influencing the presentation and its truth.

2. A drawing game with the connoisseur (observer-player)

According to Hans-Georg Gadamer the essence of every presentation is presenting to someone [5, p. 127]. Similarly, an architectural sketch is predominantly addressed to someone – an observer, an investor, a builder, a judge in a competition etc. The form which it then takes is significant for understanding its message. Sometimes, however, the drawing’s meaning is elusive and mysterious, aimed at the refined observer-connoisseur. The process of decoding it then is “(...) a conscious element of an intellectual game whose task is to draw the observer into the world of the author’s idea” [8, p. 33]. Mostly it requires an “educated” and sensitive observer who is able to read the implied meanings, although this is not always possible. An ordinary awareness of the convention of architectural drawing is insufficient in the case of the works of avant-garde visionaries (e.g. John Hejduk, Massimo Scolari). It requires knowledge concerning the authors’ ideology and the wider context of their other works. Such drawing forces you to think and guess the hidden meanings – as Wim van den Bergh wrote: “Holy games of guessing gave rise to philosophical thinking” [1]. In this way a dialogue with the observer is sustained; the drawing has a magical ability to play with his

imagination [10, p. 130]. Such ambiguous drawings may become extremely interesting and intriguing. The more we look at them, the more we begin to see [10, p. 15]. What is important is “what is happening ‘inside’ the drawing, what takes place between the drawing and the observer’s mind” [8, p. 89].

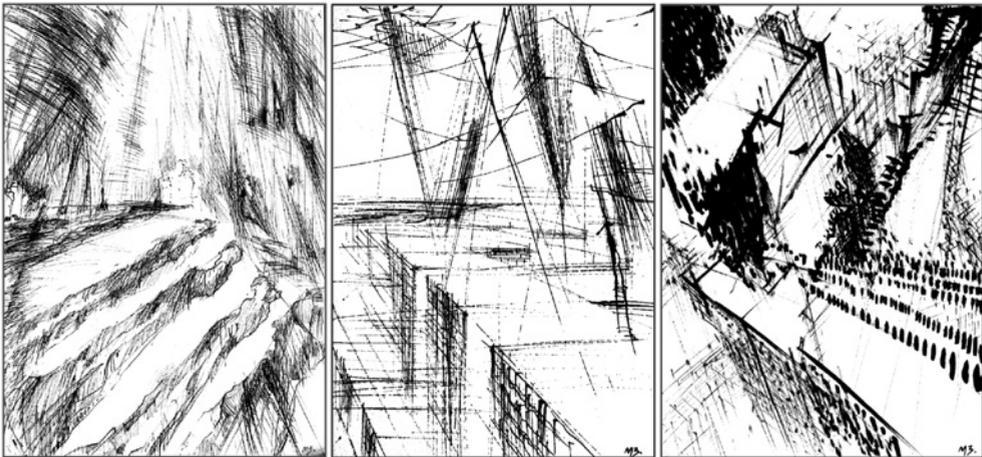
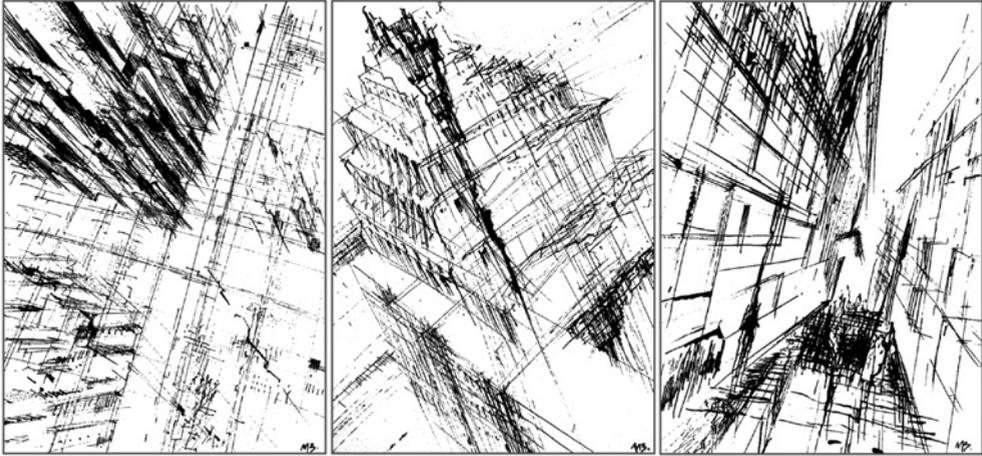
3. A drawing game with the investor

When a recipient of a drawing is a person from outside the architectural profession, it often comes close to realism so that it will be understood and accepted. Making a good impression and the spectacular selling of his ideas is important to the author. “The self-presentation game influences in this way that the player, when he is playing in something, i.e. he is presenting something, comes to his own self-presentation” [5, p. 127]. In this case it is a self-presentation for commercial purposes. The principal is drawn into a kind of a game whose purpose is the realisation of forms, even when the drawing is not entirely truthful. Different perspectives let the observer (the investor) imagine the form, seeing it in a three-dimensional space. Thanks to this, the future architectural form defined by the sketches is created in his imagination. In this case, the “rules and principles determining the filling of the space of the game are the essence of the game” [5, p. 126]. The drawings can also be part of the documentation of the design process. A reliability and genuineness must then characterise them. Such an architectural sketch precisely explains the details of the project to the builder.

An interesting variant is when an architect is designing for himself. His preliminary sketches are then a stage of the creative process, undisturbed by another person’s glances. In the creative act the architect is trying to show what is best in it, which lies deep in his personality. He is designing for a person whom he knows well. The drawings accompanying this process may be more direct and sincere. They may disclose a truth about the author and be a part of his self-presentation, which is closer to reality.

4. Enjoyment space of the drawer-player

Enjoyment in the drawing of the proposed architecture is a serious and addictive pastime. It is characterised by a loop (*feedback*), a certain repetitiveness – coming back to a point of departure in order to solve a problem in a different, better way. “It is always about a certain move in one or another direction” [5, p. 123] – a move in which the game repeats itself by continually repeating different versions. It resembles reading in a number of ways – *Hopscotch* written by Julio Cortázar (the whole book or without the chapters, which are not essential). The several versions of the aforementioned book are like several alternatives of a designed architectural form – with the necessary elements, which it is possible to arrange in different ways, and the secondary elements, which you cannot do without. Sequences of sketches become an inspiration to make further attempts to solve a problem by the drawer-player, creating diverse analogies, mutations and combinations of forms. They are an important part of the process of making corrections and fitting solutions to the established rules of the game. These rules while sketching architecture define the context of the imagined architecture, the function of the building, requirements of the investor, financial possibilities, planning regulations, material etc. Although aware of the predetermined output, the first sketches are



III. 1–6. Author’s sketches (2011–14)

largely free from these restrictions; they are a free exploration of ideas – they have something more which the final drawings don’t have: unobscured freedom and the documentation of the changes, taking place in the process of thinking [12, p. 84]. The context in such a case is inspiring, but not limiting. The recipient of these initial “sincere” sketches is only the author. As Gadamer describes it: “The real subject of the game (the experience in which only one person is playing shows it exactly) is not the player but the game itself. The very play bewitches the player, gets him caught up in the game, and maintains him in the game” [5, p. 125]. The author while drawing ‘forgets himself’, which is why this action is more real. Particularly fast, economic and expressive sketches are engrossing – “the relationship between the physical speed and speed of mind in the game ... helps designers crank up” [12, p. 88]. These drawings are not commercially-oriented ways of self-presentation of a drawing, which is

sometimes the appearance of a game. The author doesn't think about the person to whom he will be introducing the drawings; he is focused on the search for the best ideas and better solutions for the design task. "Architectural sketches, like the process of architecture, reflect the past, facilitate the present, and attempt to foretell the future. Their meaning remains personal and speaks to each individual architect. As with memory, imagination, fantasy and play, it is possible to examine their traits, but as entities they may remain elusive" [10, p. 123]. This kind of elusiveness is not a weakness but a strength of the sketches. It refers to the concept of the game that allows you to see more of the hidden meaning-alternatives in the sketches, not only by the author himself but also by the recipients.

5. The rough draft– preliminary play

Architects often draw forms that record passing thoughts and inspirations (Ill. 1–6), "spontaneously 'playing with' space on the paper" [8, p. 101]. It happens that this area of activity is inaccessible to the audience. It takes the form of a diary or rough draft covered with images-memories. Sometimes architects' drawings are treated as a serious form of artistic work universally presented, representing their professional status. Leszek Maluga calls them autonomous architectural drawings – "open letters" (as opposed to "the letter to the builder", which is part of the design documentation process), in which the author is free from the need for explicitness and legibility of the recording [8, p. 97]. From such drawings can start a real career – as it was in case of Daniel Libeskind or Zaha Hadid, who started building their projects relatively late. Zaha Hadid recalls that her parents instilled in her a passion for exploring: "they never made a distinction between science and creativity. We would play with math problems just as we would play with pens and paper to draw – math was like sketching" [6]. The fascination of geometry and mathematical logic has become inspirational in the architecture designed by her. Such an approach to science and art is treated as a kind of fun and a tool for finding out the truth that affects the development of creativity. Learning through play is a form of casual learning which is pleasing. The full involvement causes the fascinated drawer to be completely absorbed in his occupation, it is under its control. "The player knows well what the game is, and that what he does 'is just a game', but he does not know what he 'knows' here" [5, p. 122]. The culmination of this situation may be its explanation, when the drawer 'wins the game' i.e. there is a satisfactory solution to the design problem. Defeat in the game also teaches something – learning from one's mistakes, dealing with problems and encouraging the efforts.

6. Summary

Freehand drawings teach thinking through engrossing gameplay. In this process it is important that it becomes an experience that transforms the author. Sketching develops his spatial imagination – extremely important in the creative process [3, p. 59] and shapes the method of his work [2, p. 156–157]. In drawing treated as a fun game, what is valuable is what we can't plan, what comes out casually. This is possible thanks to the fact that the image in the sketches "exists close to the border between reality and unreality" [10, p. 131], in a place where the mind of the drawer interpreting the image can make the right choices. Then the resulting interaction

between the drawing and its author and heuristic methods (the ability to detect new facts and associate them with each other, which is dependent on previous experience and acquired knowledge) are helpful in discovering new truths, developing the working methods and creativity of the author, based on the ability to use the process of combining and restructuring [7, p. 21].

References

- [1] Bergh W. van den, *Icarus' Amazement or the Matrix of Crossed Destinies*, [in:] Hejduk J., *The Lancaster/Hanover Masque*, London 1992.
- [2] Białkiewicz A., *The Role of Drawing in a Modern Architect's Workshop. Krakow School against the Background of the Achievements of Selected European and Polish Universities*, Monograph No 315, Ed. Cracow University of Technology, Kraków 2004.
- [3] Białkiewicz A., *On Architectural Drawing*, "Commission of Architecture, Urban Planning Landscape Studies Polish Academy of Sciences", Lublin 2006, 53–60.
- [4] Do E., Gross M. D., *Drawing as a means to design reasoning*, [in:] *Artificial Intelligence in Design '96 Workshop on Visual Representation, Reasoning and Interaction in Design*, Palo Alto, CA., 1996, <http://depts.washington.edu/dmgftp/publications/pdfs/aid96-mdg.pdf>
- [5] Gadamer H. G., *Truth and Method*, Kraków 1993.
- [6] Hadid Z., *Zaha Hadid's Iraq: Math was like sketching*, Special for CNN, London, 30.10.2014, <http://edition.cnn.com/2014/10/30/business/zaha-hadid-stem-month>.
- [7] Makowska B., *The Significance of Sketches in the Education of Architects and in the Development of their Professional Skills*, "Technical Transactions", 4-A/2015, Ed. Cracow University of Technology, 17–23.
- [8] Maluga L., *Autonomic architectural drawings*. Ed. Wrocław University of Technology, Wrocław 2006.
- [9] Reisner Y., *The Sketches of Zvi Hecker*, "The Architectural Review", 31.01.2013, <http://www.architectural-review.com/the-sketches-of-zvi-hecker/8641729.article>.
- [10] Smith K. S., *Architects' sketches: dialogue and design*, Elsevier/Architectural Press, Amsterdam 2008.
- [11] Smith K. S., *Architects' drawings: a selection of sketches by world famous architects through history*, Elsevier/Architectural Press, Amsterdam 2005.
- [12] Smith A. C., Smith K. S., *Developing your Design Process. Six key concepts for studio*, Routledge Taylor & Francis, New York 2014.