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## THE MEANING OF FREEHAND DRAWING IN AN ARCHITECT'S PROFESSIONAL WORK

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### ZNACZENIE RYSUNKU ODRĘCZNEGO W PRACY ZAWODOWEJ ARCHITEKTA

#### Abstract

The article describes the importance of freehand drawing in the daily practice of an architectural design office. It presents the areas of activity in which freehand drawing is essential as well as those in which its importance has decreased. It presents the function of freehand drawing in communication with both an investor and other entities participating in the design process. The author emphasizes the individual character of every creator's freehand drawing as well as the easiness and freedom of thoughts expression offered by this tool in daily professional work.

*Keywords: an architect's freehand drawing, an architect's sketches*

#### Streszczenie

W artykule opisano znaczenie rysunku odręcznego w codziennej praktyce pracowni architektonicznej. Przybliżono obszary działalności, w których rysunek odręczny jest niezbędny, oraz te, w których jego znaczenie zmalało. Artykuł opisuje funkcję, jaką pełni szkic odręczny w komunikacji, zarówno z inwestorem, jak i pozostałymi podmiotami biorącymi udział w procesie projektowym. W treści zwrócono uwagę na indywidualny charakter rysunku odręcznego cechujący każdego twórcę. Podkreślono łatwość i swobodę wyrażania myśli, jaką daje to narzędzie w codziennej pracy zawodowej.

*Słowa kluczowe: rysunek odręczny architekta, szkice architekta*

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We live in very interesting times. Technological progress is discernible in all fields of professional work. New tools facilitating and accelerating design work, usually with no positive impact on the final effect, are being invented under our eyes. Most of them are connected with computer work. Graphics software generates aesthetically correct images, and designs developed by means of it can be quickly transformed and even more quickly transmitted through information networks. The pace of our work increases, similarly to the pace of life. Yet, in this constant process of development, the traditional technique of freehand drawing is still present.

Freehand drawing gives us the opportunity to make use of the simplest intuitive connection between the mind and the hand. Ideas and thoughts committed to paper very often become specific there and acquire a real shape. We also have the opportunity to intuitively underline the most significant ideas of a concept, which facilitates communication, since this technique is commonly known and understood.

Freehand drawing allows a consolidation of ideas developing in the process of creative thinking. Thoughts – very often elusive – written down or drawn on a sheet of paper become something permanent; they are the basis for further creative work, for the development of a concept. The thinking process recorded in the form of a drawing may be an inspiring basis for an analysis of creative work. In team work, one person's drawing may be subject to the creative interpretation of the remaining team members.

Each freehand drawing is characterized by the individuality of its creator. It is interesting that in the same object drawn by many persons different elements may be highlighted and stressed. The subjective perception of reality is thus presented in a graphic form. It is perfectly visible in freehand drawing or painting lessons in faculties of architecture and in all other fields of creative education.

Lectures in artistic fields enriched with a lecturer's freehand drawings explaining design solutions can attract students' attention. Such meetings remain in a future architect's memory forever and they are also a splendid example to follow. Every architect finds inspiration in his mentor's drawings. In a sense, it is comparable to handwriting; an author can be recognized by his drawings, and one can imitate his best patterns interpreting them in one's own manner. The place and atmosphere of work is of significant importance since concentration and quietness are required in creative work.

The immense easiness and freedom with which we can communicate and transfer our thoughts to others by means of a drawing is a unique characteristic of the profession of an architect. A drawing is a universal language, a product of the mind and the hand, directly and permanently connected. The language and the aesthetics of a drawing is the essence of graphic expression. Its perfection process will never end as it may be continued all life long. Thus our awareness and ability to transfer thoughts by means of a drawing are developed.

The emotional impact of sketches causes a situation of enchantment by the authenticity and spontaneity of freehand drawing.

An architect's own freehand sketch should be his pride and a manifesto to fire people's imagination. In the age of computers, freehand drawings have become even more precious.

In the daily practice of an architectural design office, freehand drawing is a matter of fact. Work on each design starts with an author's sketches. It is in these sketches that a concept's

evolution and the particular stages of the creative process can be seen. A characteristic feature of freehand drawing is the easiness of making changes and the possibility to achieve results fast, in the form of ready images. The process of analysis, for instance of the urban context, is frequently present in an architect's work. Freehand drawing on tracing paper allows a precise indication of the most important elements and components of even the most complicated structure. The handling of design problems by means of freehand drawing leads to the development of new or better versions of design solutions. It is very often a faster and more effective way to find a solution to a design problem than using even the most advanced 3D design tools. Freehand diagrams, analyses and pictographs resulting from an author's considerations perfectly enrich designs and allow a graphic presentation of the essence of a concept. Comparing a finished building to its first sketches, one can see what an architect was concentrating on at the first stage of work, what was of great, if not the greatest importance for him/her from the very beginning.

A drawing is an architect's language. The better he/she masters the skill, the better form of communication in work it becomes. Drawing skills can significantly accelerate the conceptual thinking process. The easier it is to commit thoughts to paper, the faster the best solution to a problem can be selected from among many. The development of drawing skills and their application in daily work accelerates the design process, because if one succeeds in solving fundamental problems and choosing the best solution in this way, then computer software will only serve as a tool for the presentation of a previously developed solution. A legible drawing is always personal, it is a direct presentation of a person's thoughts, it expresses his personality and creative potential.

An architect's skilful hand can sketch the essence of a design by means of a drawing, and highlight the most important characteristics of scale, space, and construction. Combining freehand drawing techniques with their computer processing is a new method of presenting designs. In this way, graphics software becomes only a tool complementing an architect's work; it does not deprive a design of an architect's individuality. Such a presentation helps to create a proper and unique atmosphere of work because it has also an emotional impact included in a drawing.

The selection of drawing tools helps us to achieve the intended result. Even the thickness of a line is of some importance. Good knowledge of available techniques is useful here. A discussion of a design based on sketches has another unique characteristic. It allows a smooth change of scale and perspective of a design. On a sheet of paper, we can freely move from the mass of a building to the elevation details and back.

One can also draw simply for pleasure and for oneself only. Ideas drawn many years earlier can be an inspiration in new designs today.

What is worth mentioning here is the early stages of work with computers and the first imperfect graphics software, not so very distant in time. Its appearance in an architect's work offered an opportunity to develop first 3D images of objects not completed yet, which certainly constituted a breakthrough. Very simple spatial images were developed then, and both architects and other people spoke about them with admiration. Today they make a positive impression and are the evidence of changes taking place in our work. Their imperfection resulting from still poorly developed software left some space of understatement, and some space for a recipient's imagination. Nowadays, works deceptively resemble photographs.

If there is a threat to freehand drawing posed by computer technology it is rather connected with an excessive and exaggerated use of computer software in independent drawing. It has been frequently repeated that this state of affairs has a negative impact on the quality of an architect's work, and deprives him/her of sensitivity and a sense of aesthetics. Individual approach and profound analysis is lost, and they are essential factors in searching for solutions to new design problems.

Freehand drawing is indispensable in an architect's work; it is a perfect tool for expressing thoughts and communicating with others. At the conceptual stage, freehand drawing allows a transition of the creative thinking process onto paper. The formulating of the first design intent in the form of a drawing is intuitive. In the subsequent stages of designing, a freehand diagram is an auxiliary tool. In an architect's professional work, drawings made during a meeting are a substitute, yet also an equivalent form of taking notes. Sheets of paper covered with sketches may be an excellent and fast way of presenting information concerning changes to a design, new solutions and details. A look at sketches brings back earlier discussions and arrangements.

In all inter-professional meetings, emphasis is put, among other things, on sketching design solutions. The best design solutions can be found by means of drawings. The details of solutions of significant elements in a design are quite frequently the effect of a drawing-based discussion between an architect and a contractor. Solving problems at a construction site is very often based on freehand drawing. It is an ideal solution when there is no computer or printer available.

Due to the ever increasing pace of work so much characteristic of an architect's profession, there is no time for drawing. Drawings are more and more frequently made by means of computer techniques only. The triumph of computer graphics is best visible in the young generation of designers who are strongly focused on generating graphic designs by means of ever newer and more advanced software.

Working with trainees, an experienced architect can frequently observe their poor preparedness in the area of drawing. The probable reason for such a state of affairs should be looked for in the changing study programmes or even in the very recruitment process itself. The possession of drawing skills is neither a point of professional honour nor an obligatory skill for the young generation of architects. If we look at job advertisements, such skills are no longer required. Potential candidates are required to know various kinds of computer software, in particular that responsible for 3D visualizations.

Computer software makes it possible to use any number of "special effects" which in principle are to shock and amaze the recipient. Quite frequently, under the shining layer of these effects there lies a substantially poor concept with very little creative value. It is more difficult to deceive the recipient by means of freehand drawing, because a drawing – in principle – is a simplified form of representing an idea or reality. There is no possibility of manipulating with perspective or light here.

In freehand drawing, we are limited by imagination and skills only. Skills can be developed and improved so that the message becomes as clear as possible.

Due to its simplicity, freehand drawing can be applied in virtually any situation and with any kind of tool.

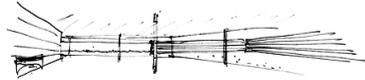
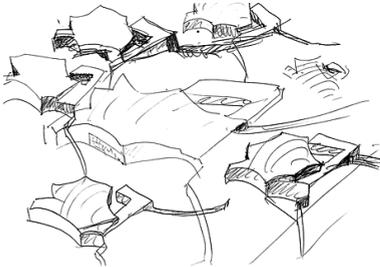
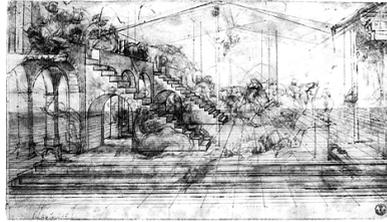
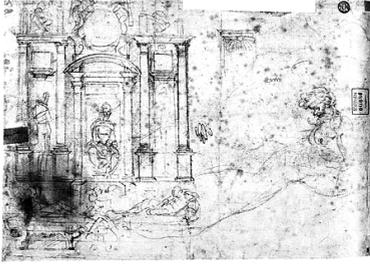
Computer-oriented education of young architects is very limiting for them. Young designers should be encouraged to improve their drawing skills. Without freehand drawing skills, soon an architect's only tool will be a computer, and without suitable software no design will be made. If the ability to communicate by means of freehand outlines of a concept is lost, designers will become addicted to computer software. Virtual reality will become the only work environment; it will become reality, in fact. Freehand drawing – an available yet unused technique – will become a virtual medium. An architect's work consists in developing space around us and creating objects. It is not possible to create good solutions being detached from reality.

An architect's communication with an investor depends largely on the former. The use of freehand drawing allows an explanation of doubts and a proper interpretation of the designed space. A good drawing technique is an excellent tool for the presentation of a design in the 3D perspective.

For investors, concept sketches are often a souvenir of the first meetings in an architect's studio. Due to the emotional impact and spontaneity, no visualization can replace an architect's freehand drawing, which is the best form of expression of his individuality. A good drawing, due to its understatement and absence of clarity, fires the recipient's imagination.

Comparing architecture to music and looking for inspiration for designing in it, we can understand how important it is to properly create recipients' frame of mind. The first sketches are the best form of expression used by an architect in his communication with investors in order to introduce them into a space yet unknown.

While computer software allows the presentation and recreation of a design idea, a conceptual freehand diagram is an integral part of designing. Working with a computer is working by means of a medium, i.e. software. Drawing is a simple process of committing ideas to paper. It is an intuitive and very personal activity which has an emotional impact the power of which depends on an author's creative potential. For a professional architect, it is not sufficient to draw well. One has to know what to draw. Freehand drawing itself is not a solution to any problem. It is a tool to provide a solution and it is an author who provides it. A drawing is as good as its author is professionally competent, and an architect should never stop improving his skills.



- III. 1. Design for a Double Tomb in the Medici Chapel by Michelangelo Buonarroti. Black chalk, 382 × 223 mm. Musée du Louvre, Paris ([www.wga.hu](http://www.wga.hu))
- III. 2. Leonardo da Vinci's preparatory drawing for the painting "Adoration of the Magi" by Leonardo da Vinci ([www.loc.gov](http://www.loc.gov))
- III. 3. Concept sketch, by Alvaro Siza ([www.galleryhip.com](http://www.galleryhip.com))
- III. 4. Hubbe House, Magdeburg, Interior Perspective (1935), by Ludwig Mies van der Rohe ([www.dokity.com](http://www.dokity.com))
- III. 5. Kolumba Museum, by Peter Zumthor ([www.archinect.com](http://www.archinect.com))

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