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FREE HAND DRAWING – A SOVEREIGN WAY TO ARCHITECTURE

RYSUNEK ODRĘCZNY – SUWERENNA DROGA DO ARCHITEKTURY

Abstract

If we teach our pupils in the same way today as we did yesterday, we deprive them of their tomorrow wrote the progressivist thinker John Dewey a century ago. Due to the rapid development of the information civilization, we tend today to overinterpret the above statement. *The virtual world continues to appear to be somewhat of a novelty to us, thanks to which architecture created with the considerable help of a computer may enjoy the glory of a modern art*¹, notes Sławomir Gzell. As a consequence of lack of a precise definition of digital tools, we often tend to regard them as “intelligent”, whereas the latter concept is often confused with “wisdom”, or even “consciousness”. Yet this does not prevent architects from relinquishing their creative prerogatives in favour of computers, which, however, disclose to them a mere fraction of the autonomously created, selected and deleted solutions. This situation is associated with the phenomenon of a systematic lowering of the role of the fine arts in the teaching of young architects – in the name of misconceived “rationalization”. It is up to us whether the implementation of the BIM standard will turn out to be a way towards the normalization of the design process, or else a universal acceptance of mediocrity. Thanks to drawing, painting and sculpture, our architecture, as well as our defective (applied) art, stand a chance to become the queen of arts, as it used to be in the past.

Keywords: free hand drawing, contemporary architecture, education

Streszczenie

Jeśli uczymy uczniów tak samo dziś, jak uczyliśmy wczoraj, pozbawiamy ich jutra – pisał przed stuleciem progresywista John Dewey. Gwałtowny rozwój cywilizacji informacyjnej skłania obecnie do nadinterpretacji tego słynnego twierdzenia. *Świat wirtualny ciągle wydaje się nowością, dzięki czemu architektura tworzona przy znacznej pomocy komputera może zażywać chwały sztuki nowoczesnej*¹ – zauważa Sławomir Gzell. Brak ścisłej definicji skłania dziś do uznawania cyfrowych narzędzi za „inteligentne”, a to pojęcie bywa z kolei myłone z „mądrością” czy nawet „świadomością”. Nie przeszkadza to jednak architektom zrzucać się swoich twórczych prerogatyw na rzecz komputerów – udostępniających im jedynie ułamek autonomicznie kreowanych, wybieranych i kasowanych rozwiązań. Ta sytuacja wiąże się, między innymi, z systematycznym obniżaniem roli sztuk plastycznych w nauczaniu adeptów architektury w imię opacznie pojmowanej „racjonalizacji”. To od nas zależy, czy wdrażanie standardu BIM okaże się drogą do normalizacji procesu projektowania czy raczej powszechnym przyzwoleniem na przeciętność.

Rysunek, malarstwo i rzeźba mogą sprawić, by architektura, nasza ułomna (użyteczna) sztuka, miała szansę być jak niegdyś – królową sztuk.

Słowa kluczowe: rysunek odręczny, architektura współczesna, edukacja

¹ S. Gzell, *Wykłady o współczesnej urbanistyce /Lectures on Contemporary Urban Design/*, Warsaw University of Technology Press, Warsaw 2015, p. 75.

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1. Introduction

The students at the Faculty of Architecture of the Cracow University of Technology have the opportunity to assess the quality of their teachers' work. This evaluation, carried out in the form of a questionnaire, concerns mainly the degree of the staff's involvement in the process of preparing their classes and lectures, the attractiveness of the teaching offer, as well as the teachers' impartiality in the process of student assessment and their attitude towards the undergraduates. Yet the enclosed opinions often refer not so much to the attitude of concrete teachers, but rather to the lectures conducted by them and even to the entire educational process. The results of the evaluation carried out in the Department of Drawing, Painting and Sculpture in the year 2018, may constitute a valid contribution to the analysis of the rationalistic and intuitive way to architecture. A very numerous group of undergraduates are unanimous in their positive opinion of both the group of teachers (consisting of architects, designers, graphic artists, monument conservators, painters and sculptors), as well as of the diversified classes and lectures themselves. Therefore, from the rational (statistical) point of view, one cannot speak of any kind of crisis. At the same time, one is struck by a number of rather isolated, though deeply critical opinions which have appeared for the first time in these type of assessments. The above rather emotional enunciations tend to undermine the sense of teaching "artistic" subjects to students of architecture and the purposefulness of attending them (particularly by senior students). It would be extremely easy and convenient to ignore such voices, qualifying them as non-representative. Yet, perceived in a wider perspective, such views definitely deserve a more careful analysis.

The Faculty of Architecture at the Cracow University of Technology remains a national leader in the sphere of saturation of the teaching program with "artistic" subjects related to free hand drawing, painting and sculpture. The word "remains" seems to be of key importance here, as the leading position is ensured to us by doing the utmost to "delay" a reduction in the number of didactic hours devoted to these subjects. Subjects associated with art are criticized, more or less openly also by numerous architects and even academic teachers, fascinated by the possibilities offered by the ever more perfect digital tools supporting the design process. Naturally, the changes observed on the Polish academic scene are merely a reflection of the irreversible (?) European and global trends, from under the sign of the announced, described and widely declared "death of drawing"²³.

2. Computer and Robert Konieczny

The abovementioned students did not limit themselves exclusively to criticizing artistic subjects. At the same time, they tried to argue constructively in favor of devoting the "lost" time to improving and perfecting their use of the CAD program – an indispensable tool in design practice.

What is characteristic is that in their argumentation there are no as yet references to simulation tools and parametric design. Therefore a genuine revolution is yet to be expected in Poland. For according to David Ross Scheer, the profound changes associated with the introduction of

² S. Gzell, *Wykłady o współczesnej urbanistyce /Lectures on Contemporary Urban Design/*, Warsaw University of Technology Press, Warsaw 2015, p. 75.

³ D. R. Scheer, *The Death of Drawing*, Routledge, London and New York 2014, *passim*.

computer-aided drafting (CAD), have not as yet questioned the role of hand drawing, as they are in fact based “on the same imaging conventions”. Whereas in the case of BIM, *for the first time since the codification of hand drawing in the Renaissance, architects have received a genuinely new medium based on an entirely different epistemological basis*⁴.

In support of their arguments in favour of the redundancy of art classes, the rebellious students recalled the silhouette and the achievements of the Silesian architect Robert Konieczny. Why him? Are there no teachers who are skeptical as regards this issue at the Cracow University of Technology? Rather not – but a failure to mention them proves the justness of the adage that it is difficult to be a prophet in one’s own land. Anyway, the choice of Konieczny is seemingly easy to justify. Firstly, he is a “young” architect. *Rem Koolhaas, one of the most important contemporary architects and theoreticians of architecture in the world is over seventy years old. Frank Gehry, who today is building on a few continents at the same time, is nearly 90 years old. On the scale of the architectural profession, the 47-year old Konieczny is a mere youngster*⁵. Secondly, particularly in the historical city of Cracow, Upper Silesia is associated with an industrial region which is free from the “weight of historical tradition” as a place where “rationalism and minimalism have fallen on fertile soil”⁶. Thirdly, for many, Robert Konieczny is a symbol of independence and authentic professional success. In this context, it is enough to mention his eight-fold nomination for the Mies van der Rohe Award, the World Building of the Year 2016 Award received for the Dialogue Centre “Przełomy” Museum in Szczecin, or his winning project in the competition Wallpaper Design Awards 2017, in the category “The Best New Private House – Konieczny’s Ark”. Finally, last but not least, Konieczny’s opinions concerning the optimization of the process of education quite unequivocally suggest that the architect opts out for a “rational approach” to architectural instruction. *I would combine architectural design with all kinds of engineering projects. If we are designing a house or some bigger building, let us also play with construction, installations – from the beginning to an end. Let us teach how to design in a comprehensive way, the way it is done by genuine architectural design offices*⁷, advises Konieczny. It is difficult not to agree with Robert Konieczny’s suggestions. For the majority of the faculties of architecture at Polish universities (if not all of them) are criticized for their excessive “idealism” – i.e. functioning in partial separation from the everyday problems of professional practice and the realities of the investment processes... In this context, Konieczny – an acclaimed creator of avant-garde, minimalist architecture, a builder-rationalist, may be regarded as an ideally selected student spokesperson – stigmatizing the whims “disturbing” the right course of the educational process.

The problem is that the above picture is incomplete and false – as it does not take into consideration Robert Konieczny’s life path, for in his youth the latter did not at all want to become an architect! He preferred to *play the guitar and loiter around the mine waste dumps. He began his studies at the Faculty of Architecture of the Silesian University of Technology in Gliwice in the critical year of 1989. His adventure with this faculty was to last for a whole decade. Robert applied himself only to those subjects which interested him. Thus he had the highest possible*

⁴ *Ibidem*, p. 12–13.

⁵ [http://wyborcza.pl/Jutronauci/7,160051,21272947,](http://wyborcza.pl/Jutronauci/7,160051,21272947,robert-konieczny-architekt-wojownik.html) robert-konieczny-architekt-wojownik.html / robert-konieczny-architect-warrior.html/.

⁶ *Ibidem*.

⁷ T. Melnicki, *Szczerzy wywiad z Robertem Koniecznym* /Sincere interview with Robert Konieczny/, 15.06.2016, archinea.pl/szczerzy-wywiad-robertem-koniecznym/.

grades in drawing (!) and designing, whereas other professional subjects were totally ignored by him; he not only failed to gain credits for them, but even ceased to attend them⁸, recollects Konieczny's friend and colleague architect Oskar Grąbczewki. It seems that the students who rebelled against art had all too rashly selected for their spokesperson an architect with an artist's soul, who had to a great extent been formed precisely through his contacts with art! Such a light-hearted approach constitutes an excellent illustration of the kind of dangers which may face one in the effect of a thoughtless and reckless reliance on digital technology. *When we connect to the internet, we enter an environment which favours desultory reading, chaotic thinking and superficial learning*⁹, warns Nicholas Carr. Ultimately, the selection of Robert Konieczny turns out to be misguided and, more importantly – simply injurious to him.

3. And maybe Hugon Kowalski?

At this point, yet again there arises a temptation to conclude that the critical opinions of a handful of students with regard to artistic subjects, are totally unjustified. And yet... the spirit of contrariness prompts yet another thought experiment, namely: an attempt to search for a young Polish architect who might serve as an example of a purely rationalistic way to architecture. The student logic of *the internet search engine* comes up with yet another candidate. It is none other than the 31-year old Hugon Kowalski – an undergraduate student writing his diploma thesis under the supervision of Robert Konieczny, and at the same time *the most titled young architect in Poland*¹⁰. His project devoted to the slums of Mumbai, “Let us talk about garbage”, won the first prize in the competition Archiprix International/ Hunter Douglas Awards for the best architectural diploma in the world in the year 2013. Kowalski was the first Polish student to have received this distinction. In the year 2016, he was invited to take part in the main exhibition of the 15th International Biennale of Architecture in Venice¹¹. In the eyes of the students who are opposed to the notion of “wasting” valuable time on classes devoted to drawing, painting or sculpting, Hugon Kowalski seems to be even a cut above Robert Konieczny. For the latter still belongs to the group of people *whose life began with what one might refer to as analogue youth, and only after a quick but thorough reorganization of its foundations, entered the phase of digital maturity*¹². In the case of Kowalski, there can be no talk of any need for reorganization – as he represents a generation for whom using digital tools is an obvious choice.

Yet the opponents of the hypothesis concerning the importance of the fine arts in the process of educating prospective architects are in for yet another disappointment. *Hugon Kowalski is an atypical architect: first of all, he graduated from the department of architecture of the Academy of Fine Arts; second of all, he is a complete idealist; and third of all,*

⁸ <http://wyborcza.pl/Jutronauci...>, *op.cit.*

⁹ N. Carr, *Płytki umysł. Jak internet wpływa na nasz mózg* /The Shallows. What the internet is doing to our brains?/, Helion S.A., Gliwice 2013, p. 145–146.

¹⁰ T. Malkowski, *Młodzi architekci: Hugon Kowalski* /Young architects: Hugon Kowalski/, ARCH, No.6(20) /2013, p. 58–71.

¹¹ A. Cymer, *Hugon Kowalski na biennale architektury* /Hugon Kowalski at the Biennale of Architecture/, 22.02.2016, <https://culture.pl/pl/artykul/hugon-kowalski-na-bienale-architektury>.

¹² N. Carr, *Płytki umysł... op.cit.*, p. 22.

*his imagination is totally boundless. This graduate and subsequently lecturer at the Faculty of Architecture and Urban Design (currently, the Faculty of Architecture and Design) of the University of Fine Arts in Poznań, always takes a...pencil and a pad of paper with him on his journeys¹³! His memories from his home University do not seem to support the views of the proponents of “progress” either. *The period of studies was a time of trying to discover oneself. (...) We have similar classes as students at technical universities, yet the syllabus is broadened to include other subjects, such as ceramics or sculpture. It is such a school, where architects tend to have too many classes, as you may pick a number of optional subjects – such as fashion or photography. In the first year, we do not go anywhere near architecture; we are only preparing ourselves for this; there is, for instance, by taking up bionics or deriving one’s inspiration from nature. (...) Another thing that differentiates us from the students at technical universities is that we have a lot of free hand drawing – 4 hours a week, up to the fifth year of studies. We have 12 drawing workshops to choose from. You sit in a studio and draw with students of sculpture or graphic art and you know that you are the worst in this group; and you must really try hard to be some sort of match for them. (...) We differ from the students of technical universities in that we “delve” into those spheres which are slightly peripheral in relation to architecture itself – which gives us a broader view¹⁴.**

The words of the young architect sound strangely familiar; one may even get the impression that he is describing the 20th cent. syllabus at the Faculty of Architecture of the Cracow Technical University which preceded a series of “rationalizing” and “modernizing” reforms! And what about Kowalski’s professional practice? Naturally, in the big architectural offices, such as Foster’s in London, Kowalski had to resort to Excel and AutoCad. Yet even in this case, the proponents of the progressivist vision of the practice of an architect’s profession may feel disappointed. For, as it turned out, Kowalski’s boss and one of the main partners in Christopher Ingenhoven’s architectural office in Dusseldorf *had no computer at all, but was quite proficient at drawing¹⁵.*

4. On the burning need for drawing which apparently had “Died out”

*Now we are thinking of whether not to go into parametrics, as it seems to be the latest discovery. (...) Of course parametric design constitutes yet another tool; one has to learn how to take advantage of it, but it will not replace thinking¹⁶, Hugon Kowalski declared in the year 2013, already in the role of a young academic teacher. Yes, nothing can fully replace the discoveries made with pencil in hand; the illuminations experienced with a brush in front of an easel or the feeling of being merged into one with the form during the process of sculpting... Paolo Belardi, the author of a book, entitled *Why architects still draw*, quotes in it the opinion of Man Ray: *I paint what cannot be photographed and I photograph what I have no intention of painting. (...) If it is something I cannot photograph, like a dream or**

¹³ Z. Mielczarek, *PURO Q&A: Hugon Kowalski*, 28.02.2017, <https://purohotel.pl/pl/puro-mag/people/puro-qa-hugon-kowalski>.

¹⁴ T. Malkowski, *Młodzi architekci.../Young architects/*, *op.cit.*, p. 68–69.

¹⁵ *Ibidem*, p. 59.

¹⁶ *Ibidem*, p. 69.

a subconscious impulse, I must resort to a drawing or a painting. Belardi comments on this statement in the following way: *If it is true what Man Ray said, namely that only a drawing allows us to express our dreams, it is also true that those who cannot dream, are also incapable of drawing*¹⁷.

Yes – computers cannot dream. Professor Ryszard Tadeusiewicz, a great computer expert and enthusiast of artificial intelligence, dampens the hopes that are universally associated with the potential uses of artificial intelligence. *For artificial intelligence is not a tool that can be used everywhere and for every possible purpose. (...) What is absolutely necessary in order to transform information into knowledge, is intelligence. And it is precisely here that we can make use of artificial intelligence. The latter may relieve us from the frequent need to repeat the same mental operations and from performing various routine analyses that for instance support the processes of decision-making. (...) Thus with the exception of the sphere of feelings, abstract thinking and artistic creativity – one can say that computers may compete with people*¹⁸. What differentiates us from computers is wisdom which is based on the human ability to understand universal principles (for a computer nothing is “obvious”) as well as intuition which is so important, for instance, in architectural creativity. *By using imprecise data, man can easily come to the right conclusions, in spite of an apparent lack of sufficient grounds for reaching them. In the majority of their typical applications, computers calculate precisely, and in accordance with the rock-solid principles of logic – but in many cases, they obtain erroneous results*¹⁹. In this context, the ease with which architects are ready to voluntarily resign their creative prerogatives in favour of the unfeeling and only apparently perfect digital tools, is somewhat scary. *Computers leave us only a minimal percentage of their productions. (...) We may never see the transitional effects of their operations which the computers themselves recognized as imperfect (...) Without a shadow of a doubt, some of the “transitional productions” have no sense, yet others may be truly ingenious*²⁰, cautions Professor Sławomir Gzell. However, what can one do in a situation when an eager resignation from the role of a genuine creator, is more and more often accompanied by an unwillingness to analyze the wealth of options that is considerably offered to us; the latter attitude is often the effect of haste or else a sense of one’s own comfort. And the worst thing is that, as is declared by Augusto Romano Burelli, the measure of a genuine decline of the status of an architect, is not yet exhausted by the omnipresent commercialization, pride and laziness²¹. The true drama takes place when we are not able to give the first creative impulse that gives direction to the digital tools, or else competently evaluate the results of their work – not for lack of technical knowledge, but for lack of suitable existential experience.

¹⁷ P. Belardi, *Why Architects Still Draw*, The MIT Press, Cambridge, Massachusetts 2014, p. 41–42.

¹⁸ R. Tadeusiewicz, *Nowe możliwości technik obliczeniowych wykorzystujących sztuczną inteligencję / New possibilities of calculation techniques making use of artificial intelligence/*, [in:] M. Złowodzki, T. Juliszewski, H. Ogińska, A. Taczalska (ed.), *Ergonomia wobec wyzwań nowych technik i technologii /Ergonomics and the challenges of new techniques and technologies/*, Cracow University of Technology Press, Kraków 2016, p. 31, 35, 60.

¹⁹ *Ibidem*, p. 45.

²⁰ S. Gzell, *Wykłady... /Lectures/*, *op.cit.*, p. 75.

²¹ A.R. Burelli, *Architectural Drawing in the Age of Digital Reproduction* [in:] F. Schillaci (ed.), *Architectural Renderings*, John Wiley and Sons Publications, Chichester 2010, p. 71–84.

If we lead to an atrophy of imagination and intuition, or what's worse, if we never give them a chance for development, a sterile, computer-aided mediocrity and needless geometrical complexity will unavoidably become the result of our activity! Paolo Belardi states with conviction that in architecture even today "sketches constitute the FOUNDATIONS of ideas". The human mind "synthetically visualizes" these ideas "by means of an extraordinary seismograph known as the hand"²². Juhani Pallasmaa even refers to the hand as a "thinking" instrument – provided that it is able to draw, paint or sculpt...²³.

5. Summary

What would Pallasmaa say to students of architecture who are opposed to the "archaic" and highly debatable experiments in the field of hand drawing, painting or sculpture? *The problems associated with a fully computerized design process are becoming quite obvious particularly in the most sensitive early stages of the design process, when the architectural form and essence of a building is being defined and specified in detail. (...) When someone is young and has relatively narrow horizons, he/she wishes that the text or drawing should describe the previously planned idea; he/she wants to endow it instantly with a precise shape*²⁴. Therefore, according to students, a drawing often constitutes a painstakingly executed *side-effect of the process of a detailed description of something that already has a ready and stationary form*. The thus understood "hand mapping" may indeed be successfully replaced by resorting to the use of digital tools. Yet both a study from nature and a free drawing without a model are something quite different! *A drawing is (...) not so much a representation of 'ready-made' thoughts arising in one's mind, but an inseparable element of the very process of thinking. It is not a materialization of thought, or even its expression, but it is the very thought in action, sometimes meandering and getting lost in dreams, at other times, testing the possibilities of various other solutions*²⁵, writes Ewa Klekot in her introduction to the book by the Finnish architect. *The statement that a piece of charcoal, a pencil, a pen and a computer mouse are all equally good and mutually interchangeable in the case of a need to draw an architectural project, testifies to a complete lack of understanding of the essence of the unity of hand, tool and mind*²⁶, adds Pallasmaa.

6. Conclusions

According to one of the conference theses: *rational and irrational tendencies are not in opposition to one another*; hence there is no room here for strong alternatives expressed by

²² P. Belardi, *Why Architects... op.cit.*, p. 24.

²³ J. Pallasmaa, *Mysłąca dłoń. Egzystencjalna i ucieleśniona mądrość w architekturze /The Thinking Hand. Existential and Embodied Wisdom in Architecture/*, Instytut Architektury, Kraków 2015, *passim*.

²⁴ *Ibidem*, p. 104, 122.

²⁵ *Ibidem*, p. 10.

²⁶ *Ibidem*, p. 56.

the word “or”. “Rationalist skepticism does not reject the mysterious world of intuition”. In order to exist, the physical structures of architecture, require solid and up-to-date knowledge as well as iron logic from the creator. Whereas it is only a reliance on intuition that gives a design project a chance for uniqueness and genuine greatness. Contemporary architecture requires the use of sophisticated digital tools, but at the same time, it demands the touch of the human hand; the hand of an architect-artist!

For a prospective architect, drawing, painting and sculpture constitute a school of thinking, a training ground of unbouded imagination and a power-house of professional intuition. In a world dominated by the information civilization, these attempts aimed at developing “existential wisdom”, are currently acquiring a truly avant-garde dimension²⁷.

In the postscript to his book, entitled *The Death of Drawing*, David Ross Scheer considers the chances for architects to retain a leading role in the new, complex process of design simulation. He comes to the conclusion that in order to be able to continue to understand, control and critically assess its results, the architects need a powerful tool such as... a drawing!²⁸

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²⁷ P. Setkowicz, *Rysunek odręczny w świecie cyfrowej architektury – anachronizm czy awangarda? /Hand Drawing in a World of Digital Architecture – an Anachronism or an Example of the Avant-Garde?/*, [in:] G. Rzepecki (ed.), *Integracja sztuki i techniki w architekturze i urbanistyce /Integration of Art and Technology in Architecture and Urban Design/*, University of Technology and Life Sciences Press, Bydgoszcz 2015, p. 329–343.

²⁸ D. R. Scheer, *The Death... op.cit.*, p. 227.

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