## **TECHNICAL TRANSACTIONS**

### CZASOPISMO TECHNICZNE

ARCHITECTURE

**ARCHITEKTURA** 

8-A/2015

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## THE GAME OF THINKING ABOUT ARCHITECTURE

# GRA MYŚLENIA O ARCHITEKTURZE

### Abstract

The game of architecture determines the game field for thoughts: with shapes, colours, textures, lights and shadows. It reveals something true just because it is a game. During the game, conceived, imagined world of shapes, is revealed in the presentation. One of the possible ways of architectural thinking referred in the text can be found three types of creative process: intuitive, reflexive and behavioural one. Like a sorcerer casting a spell "let it be", imagination transforms unreal architecture in a mental fact. Thinking of creative minds enabled to create representations, owning to which outstanding timeless architectural works are implemented in the real world.

Keywords: architectural game, creative thinking, idea, defining of building's form

### Streszczenie

Gra architektoniczna wytycza myślom pole rozgrywki: o kształty, kolory, faktury, światła i cienie. Ujawnia coś prawdziwego właśnie dlatego, że to jest gra. Podczas gry, pomyślany, wyobrażony świat kształtów, objawia się w przedstawieniu. Przywołane w tekście jedne z możliwych dróg architektonicznego myślenia można odszukać w trzech typach procesu twórczego: intuicyjnym, refleksyjnym i behawioralnym. Wyobraźnia tak jak czarownik rzucając zaklęcie "niech się stanie" przemienia nierzeczywistą architekturę w myślowy fakt. Myślenie twórczych umysłów pozwoliło stworzyć wyobrażenia, dzięki którym zrealizowane są w realnym świecie wybitne, ponadczasowe dzieła architektoniczne.

Słowa kluczowe: architektoniczna gra, twórcze myślenie, idea, definiowanie formy budowli

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**1. Game; to-and-fro movement.** In his reflections, Paul Ricoeur develops the notion of play, the motif with which Hans-Georg Gadamer supported his considerations on the work of art [11., p. 277–283]. Each game has its own way of existence, but it is always marked by the fact that even when it takes place in solitude, the presence of something which the game is played with or against is required. The object of the game, perceived in terms of aesthetic experience, is not the one who plays, as the sense of the game consists in what happens during it, although the player also remains under its influence. Ricoeur captures the essence of the specific movement between the game and the presentation of the world in a literary work in the words: *to-and-fro*.

The game of architecture determines the playing field for thoughts: with shapes, colours, textures, lights and shadows. It reveals something true just because it is a game. However, metamorphosis takes place during the game, imaginative transformation of the kingdom of images. Reality is supposedly abolished, the world of work becomes a heuristic fiction, and in this sense it is the game of discovering new images. During the game, conceived, imagined world of shapes, is revealed in the presentation. In the theatrical performance characters and roles played are recognized; likewise, architectural work, the effect of pure creative imagination, reveals the shapes and aesthetic and pragmatic goals assigned to them in its presentation.

Ricoeur indicates the rule of the game in the words *to-and-fro*. John Dewey explains the essence of thinking in a similar way, also in terms of double movement; *to* and *from*, *there* and *back* [3, p. 84–88]. In this approach, an instinctive movement leads one' thoughts towards some indefinite *there*, where a guess, hypothesis is revealed and at the same time drives them *back*, *from* ideas *to* facts. He identifies inductive discovery with the movement of thinking which seek to create a rule. Deductive reasoning: developing, testing and applying the principle is assigned to the return of thinking, running *from* the adopted hypothesis *to* the facts. The essence of this double movement consists in the relationship between inductive thinking; from the particular to the primary rule, and deductive – testing the rule through the particulars.

The movements of thinking related to architecture seem to resemble a situation that could be described as a crossroads. From an obscure beginning, yet inert, impulsive thoughts, questionable, provoking questions and a desire to explain them, they turn their drive into the deliberate quest for answers and solutions to problems absorbing the mind. A significant feature of thinking is discernment of intertwined episodes and events, a string which is not chaos, but a crossroads of possibilities, creating a special opportunity to organize emerging fantasy creations through conscious leading of thoughts to putting proposals. In this movement of thinking the facts begin to play the role of indicators and signs of architectural shape of a thing not familiar enough. Therefore, reflective thinking should be considered – thinking in the best sense of the word.

**2. Epiphany and reflection**. The *fro-and-to* movement, in which one can see the sense of thinking, indicates an affinity with the nature of creativity defined as a dialectical process, two-sided, understood as the simultaneous interplay of different "lines of tensions" [13, p. 27]. One of the indicated opposition lines which overlap is creative inspiration and intellectual work conferring shape on the "inspiration". Likewise, "epiphany" and "reflection" are opposites.

One could look at the procedure of architectural thinking in this way and consider it in terms of epiphany and reflection. An instantaneous creative act would be considered a kind

of grasp of the idea appearing as an epiphany and oppose it with the laborious process of deep reflection over this idea. Epiphany is associated with that which used to be described as the fact that someone came up with the idea, has a vision of the shape of architectural space, intuition, and, what is more, is endowed with imagination. Reflection is associated with analytical thinking leading to concretization of an idea, experience lasting in time.

"Epiphany" resembles Dewey's movement of thought *to*, spontaneous thinking. "Reflection" can be equated with the movement *from*, when resources of knowledge and experience and the ability to use them constitute the basis, underpin, encourage reflection, are a reference point on the road to making choices leading to a final decision.

Yet, it is impossible to deny that the states of "epiphany" and "reflection" opposite in their essence remain in an inseparable relationship which is characterised by the movement of thought both *to* and *from*. As suggested by Janina Makota it befits to look at epiphany and reflection in art, including architecture. Considering the essence of creative imagination, she believes that reflection may be a series of visions quickly moving through the mind, as if a series of epiphanies of differing importance [9, p. 138].

The power to create ideas assigned to imagination, forced to effort by acts of will, is not manifested in the unilateral recognition of architectural geometry of shapes. On the contrary, in the complex procedure of finding the form of a building in the imaginary world; a special kind of thinking, which is imagination, can erect the building in different places, observe it from different angles, choose the appearance of external views and the shape of the interior space, select the structural design and matter appropriate for it. That is exactly what results in the fact that the role of imagination is not limited in the movement *to*, when an idea is born, or the movement *from*, when architectural form is converted to real shape in one's thoughts. In both of these movements of thought a sudden epiphany may be may be a coincidence prompted by creative intuition, but also the result of prior thought. Then reflection could be treated as a series of epiphanies of differing importance, emerging and overlapping in time.

**3. Attitudes**. One of the possible ways of architectural thinking referred to here can host three types of creative process: intuitive, reflexive and behavioural [4, p. 182–189].

In intuitive creativity, the taking of a decision via the discovery of artistic vision is the most important, where intuition, without discursive motivation, is sometimes referred to as enthymeme thinking, a shortcut, providing an immediate response to the bothering problem emerging from the inner compulsion, giving a sense of confidence about the decision validity at once. Perhaps evocative of the *to* thinking or "epiphany".

Reflective creativity, in contrast to the intuitive, lasts in time, because all ideas are subjugated to the control of consciousness, subjected to artistic selection, to determine the best of the arising opportunities. It could resemble the *from* movement of thought or "reflection", when different epiphanies appear.

The third case is behavioural, when creation is not subordinate or determined by any specific vision. The final version of an idea is the result of a transformation of the same theme, unrestrained shaping. Here there is no place for a rigorous sequence of *to* and *from* movements, it rather resembles a choice among a multiplicity of emerging epiphanies. The first idea generates another, and is the reason for the emergence of the next, in both unpredictable and consistent ways. Possible due to the beginning.

From a psychological point of view one can distinguish the introverted and extroverted nature of the creative process, considering the author's works, effects of an idea and

decisions<sup>1</sup> [6, p. 364–365]. When thinking guides the author's judgment, making use of the full freedom of expressive capacities, then it is the case of introverted attitude. It resembles "reflection" on the routes of the movement of *to* and *from* thinking.

The opposite attitude attributed to thinking is extroverted, which makes the idea work, to a greater or lesser extent, it appears as ready-made. It is these ideas, unobtrusive and determining shape themselves, that put the creator in a comfortable position to accept the idea, which does not now allow to add or take anything away from itself. It is among these cases that infrequent "epiphanies" appear, delineating new frontiers in architecture. Arthur Schopenhauer explains the importance of these facts by distinguishing between talent and genius; talent hits a target no one else can hit; genius hits a target no one else can see.

It befits to refer to the mind's capacities, those determining the path an architect takes, a path traced with personality's character, the capacity for knowledge and thinking abilities manifested in different but complementary forms.

**4. Intuition**. The existing world of architecture defines the need for colloquial actions, behaviours and experiences, passed on by custom, tradition or law. It would seem that the roles and places designated in such a way give one a sense of belonging and security, cause full acceptance. However, the instinct for exploration has caused that, since the dawn of cultures, architecture exceeded the limits set by what is already known and provided, gave shape to that which is invisible.

Gaston Bachelard says that the world is man's appetite, the human heart is hungry for images [2, p.15]. In metaphorical terms an unbridled lust for changes in the existing architectural landscape, the reason to start the game of thinking, willingness to join in the experience of capturing other constellations of shapes, in crossing the known and setting the unknown borders in this art.

The word "image" is the cause of misunderstandings, especially in psychological considerations, since we see images, recreate images, keep images in mind, but according to Bachelard one image is missing, "a direct product of the imagination". Analysing the considerations of Bergson, who devotes a lot of attention to the notion of "image", he notices only a mention of "creative imagination", being compared to "fantasy trifles", which no relations with "great acts of freedom" as indicated by his philosophy were assigned to.

Bachelard perceives such treatment of freedom as the basis which allows one to look at a variety of images as a reflection of how the mind allows itself to treat nature. He also suggests regarding imagination as the power of the mind for its "ability to create images", and further to regard the perception of imagination as "a function of reality", developed by classic psychology, as "a function of unreality", substantiating the proposal with the following conclusion: "how can one predict, not being able to imagine" [2, p. 377–378].

Jean Paul Sartre defines imagination in a poetic way, calling it an "act of magic", which may be associated with a spell conjuring the thing that one is thinking about. Like a sorcerer casting a spell "let it be", imagination transforms unreal architecture into a mental fact. Sartre distinguishes between perception of noticing and imagining a thing. Perception

Jung also indicates the division of the two types according to major mental functions, that may occur in the case of an introvert and extrovert; thinking (intellectual type), feeling (emotional type), sensation (perception type), intuition (intuitive type).

and imagination place objects in the consciousness in a different way [12, p. 30–31, 225]. Perceptive perception perceives its object as existing. Imagination can assume the object as non-existent, as absent, as existing elsewhere, or it can "neutralize itself", i.e. not assume the object as existing. The role initiating the architectural game should be ascribed to imagination, courageously leading thoughts along the crossroads of pure possibilities offering still unknown shapes. However, their choice cannot do without creative intuition.

Intuition is linked to the realm of feelings, sense or intuit, it makes the mind capable of a specific type of discernment, supported with an irrational, foreboding capturing of the essence of the thing, the problem, beliefs or attitudes, as a result of the spontaneous movement of thoughts which cannot be fully justified. This intuitive ability to foresee causes that, without a rational procedure, it becomes possible to perceive, dispute, decide and define the shape of architectural things, not raising doubts, surprising with accuracy and appropriateness.

In the art of building it is hard to overestimate the qualities of mind in interpreting the architectural geometry, their undeniable power to conjure up shapes. The marriage of imagination revealing non-existent things, intuitive feeling, spontaneous and reflective thinking offering logical and rational conclusions, are abilities conducting experiments on the limitless territories of possibilities. Supporting the experience of discernment of phenomena and things, they shape the inner architectural sense. They support the game where the representation is communicated, "not as a thought, but as the inner feeling of a purposive state of mind" [7, p. 213., 242]. The idea of the shape of the building is revealed there.

**5. Representation**. Since the dawn of cultures, the art of building exceeded the limits of what was given and known, determined the boundaries of the unknown. The image of "play" presented by Ricoeur, the *to* and *from* thinking indicated by Dewey, as well as the "epiphany" and "reflection" disclosed by Stróżewski, tell us about the same kind of experience. The nature of this experience is directly associated with architectural creativity – creativity based on the game of thinking.

The architectural game does not consist in the movement of unrelated ideas that "come to mind", although their appearance is not surprising, they are an obvious expression of the spontaneity of artistic fantasy – imagination and intuitive feeling embedded in creative thinking. Hence, spontaneous pursuing movement – to is the thinking seeking the principle which merges all the elements of geometry of the form, idea, and concept of shape of the conceived building before it is available to the senses of sight and touch.

A design captured in a spontaneous mental outline takes on the characteristics of reality when filtered by the movement - *from*, reflective thinking reminding about the character of location, the place in space, the programme of a design task's usefulness, and technical capabilities enabling implementation. These facts confirm the validity of the idea, suggest a correction, or require rejection of the concept.

One should perceive this procedure the way Gianugo Polesello suggests, speaking of "duties" (*obblighi*) towards "Composition", which must be non-habitual, announce the necessary reasons and causes for the design shape, point to the understanding of the origin and meaning of "Quest" [10, p. 9–10]. Only then is the relationship between spontaneous and reflexive thinking, between epiphany and reflection, between imagination and intuition, and between discursive thinking and logical reasoning revealed. The stated problem sets the goal

of thinking, but this goal determines different ways of thinking subordinated to genuine facts undergoing a creative interpretation extracting the shape of architectural space. This resembles the custom of the post-Platonic philosopher who turned away from ordinary life just to think, but thought in order to return to everyday life knowing how to solve its problems.

According to Dariusz Kozłowski, architecture may need a "pretext" even more than any other art [8., p. 51]. He perceives the architectural pretext as the beginning of the design: as memories, afterimages, representations of images of a city and building, as memorized shapes, colours, planes and directions, or only as a "mythical representation", and above all the content of the World Museum of the Imagination. Kozlowski explains the distinction between the term "pretext" and "motivation". He understands pretext as an "imaginary reason", a false pretence given to hide the proper cause, "the real reason", which he assigns to urban "motivation". In this approach, all the real facts of architectural and urban nature are no longer trivial precepts, they become inspirations for joining the game of architectural thinking, heading towards the quest for the ever different poetics of the building's form manifesting itself in the representation of things.

The sense of architectural representation that exceeds existing canons of architecture works not only in the design of particular structures. The creative mission of the mind also contains generation of ideas-manifestations provoking the appearance of thoughts characterising the creative work of each successive generation of architects. This kind of thinking can be seen as a creative experiment, not as a plaything, but as a special kind of architectural game, indicating the basis for new guidelines of artistic creativity, which takes place also beyond architecture. Discussing the essence of his music, Karlheinz Stockhausen sees it as an experiment that allowed imagination to break out. The experiment is to be equated with the search for originality by breaking rules, a combination of feelings and thoughts, fantastic experience and cool reasoning, always accompanying those for whom the present is the frontline of the future architecture.

Experimental representations and far-reaching visions are an eternal, like time, way of searching. They communicate ideas, which reality, not keeping pace with thought, still cannot tame. Martin Heidegger sees the basis of an experiment in the hypothesis of a certain law. Newton used to say: *hypotheses non fingo* – hypotheses are not an arbitrary invention, and by extension, Heidegger makes the experiment a procedure based on the hypothetical law in order to gather facts supporting the alleged law, or the exclusion of its acceptance [5, p. 134].

Identifying relationships and dependencies in a working hypothesis, combining assumptions in a compact, logical whole, Dewey ascribes to inference, stressing that, "this recognition being brought about by the discovery and insertion of new facts and properties" [3., p. 84–88]. Innovations emerging in this way justify the reason for the diversity of openings that has taken place in the theatre of architecture, the game that takes place and creates a string of the history of the art of building.

The importance of architectural experiment may bring to mind the merits of rhetoric, originally the art of persuasion, when norms and rules are challenged, when in the course of the free clash of arguments and counterarguments crucial decisions are made, influencing other views and affecting different order of architectural things. The meaning of these quests is contained above all in visions taking on the nature of an artistic manifestation, or a voice in the discussion on the problems in the whole of this art.

It must be emphasized that the experimenting thinking of creative minds enabled the creation of representations, owing to which outstanding timeless architectural works are

implemented in the real world. That which Aristotle talked about is proved in them: "impossibility" should be considered either in the light of its artistic effect or idealising tendency. What is more – "With respect to the requirements of art, a probable impossibility is to be preferred to a thing improbable and yet possible. […] for the ideal type must surpass the reality.[1, p. 366].

Revised compilation, based on Architektoniczna geometria, Kraków 2005

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