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## LAYERS OF INTUITION IN ARCHITECTURE

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### WARSTWY INTUICJI W ARCHITEKTURZE

#### Abstract

A work of architectural art is both a manifestation of the individuality of its author, who operates in a given cultural landscape, and an initiation and enactment of a new life that completes and enriches the environment from which that work originated. In the case of architecture based solely on rational criteria, or solely on intuition, there is no chance of extending a thought into reality. Such architecture can result from a design process that has been correctly (meaning: rationally) carried out, but that methodology fails to guarantee a 'living architectural organism' stemming from the 'archaeological ecosystem'. The completion of an architectural object marks just the beginning of existence of living architecture in the material world. Its 'viability', entailing such qualities as adjustment to the widely understood context, changeability, multi-layeredness, etc. is the basic medium serving the purpose of communicating with viewers within the context of various cultural, social, psychological and physical values.

*Keywords: design process, layer, event, place, space*

#### Streszczenie

Dzieło architektoniczne jest zarówno wyrazem indywidualności jego twórcy działającego w określonym krajobrazie kulturowym, jak i rozpoczęciem/inicjacją i inscenizacją nowego życia, które uzupełnia i wzbogaca środowisko, z którego owo dzieło wyrosło. W przypadku architektury wyrosłej tylko na podstawie kryteriów racjonalności lub tylko na intuicji nie ma mowy o przedłużeniu myśli w realną przestrzeń. Architektura ta mogła powstać w wyniku właściwie – w domyśle racjonalnie – przeprowadzonego procesu projektowego, lecz taka metodologia nie gwarantuje powstania „żywego organizmu architektonicznego” wyrastającego z „architektonicznego ekosystemu”. Realizacja obiektu jest zaledwie początkiem istnienia żywej architektury w materialnym świecie – jej „żywołność”, w której zawiera się dostosowanie do szeroko rozumianego kontekstu, podatność na zmiany, wielowartościowość itd., jest podstawowym medium służącym do komunikowania się z odbiorcami w obrębie różnych wartości kulturowych, społecznych, psychologicznych i fizycznych.

*Słowa kluczowe: projektowanie, warstwy, wydarzenia, przestrzeń, miejsce*

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## 1. Introduction

Architecture is connected with technology to a degree far greater than any other branch of art. The use of energy-saving and multimedia techniques at every stage of construction of an architectural structure increases that interference to the level that allows one to talk about the dependency of architecture on the development of science and technology serving primarily the functional sphere.

As a result of the development of modernism, characterized by the novelty of technical solutions, tendencies have occurred to replace aesthetic intuition and sensitivity with parametric methods. Legal regulations, statistics, political considerations and parameters of materials and structures are translated into the language of diagrams and then transformed into architectural forms. Thus, a building is a result of a broad negotiation between various factors and data. Such a type of architecture is enthusiastically supported by contemporary management models based on economic effectiveness and universal technological rationalism. The problem occurs when a viewer tries to decipher the work of architecture built according to those principles through the interpretation of its visual codes, metaphors and symbols, with those codes and their interpretation based on historical knowledge and memory. If the form and function are a conscious structure, and if the elements of that structure are united by **sense** (aim) and a readable intention of the architect, we are dealing with an outstanding piece of art and the viewer is bound to discover its complexity and equivocity. In theory, such unification is possible to attain with rational factors – assuming that the very design process has been carried out in a rational way. However, the model and organization of that process and its structure are the reflection of the mental order that is an ordered stream of events combining countless operations that take place in a human mind. It remains in a state of dynamic balance, not getting stuck in either the rational or the emotional field, and not just using past experience. In the architect's mind, separate systems of aims and values come to the fore. Their successive appearance, governed by external influences, intensity, mutual relations translate into the quality of the architecture thus created. The process can be compared to the superimposition of subsequent 'layers', with every layer influencing or modifying the one that comes after it. Should any of those layers become dominant – regardless of whether that layer belongs to the rational or the emotional field – the result will be single-valued architecture.

The design process focused on the rational aspect produces architecture that seems cohesive and logical, but fails to create the environment responding to diverse human needs, both psychological and physical. On the other hand, a prevalence of emotional and intuitive approach to design yields megalomaniac forms representing only the system of values of the architect, or based on an intrinsically false theory or idea. In both cases we are dealing with arrogance that – this way or that – produces the same effect: elimination of the human aspect from the work of architectural art. Such architecture is also anti-contextual; if the existing architectural environment was influenced in its development by both the rational and the emotional factor, how can either of those factors be absent from the design of new elements of that environment?

## 2. Image

Architecture, however understood, is predominantly a visual art. Speaking about architecture we speak about sight and the **continuity** between sight and mind. That continuity is

present both at the design (creative) stage and at the stage of perceiving architecture as a real object in real space, when our perception is supplemented with the stimuli provided by the remaining senses.

If, then, sight is a leading medium when reacting to architecture, the design process has been concentrated on an **image**<sup>1</sup>. Historically, an object was designed in the manner suited to the static, contemplative perception limited to just a few points. Modernist architects rejected the Albertian window in favour of the concept of time-space. Villa La Roche has been designed as *promenade architecturale*<sup>2</sup>, in which the visitor or user experiences continuous viewpoint changes forming spatial sequences carefully orchestrated by Le Corbusier. In other words, historical architecture was governed by the rules of painting, while modern architecture is governed by the rules of filmmaking.

The observation and interpretation made in that dynamics results in the integration of existing forms and spaces with imaginary elements. Getting to know in depth the existing spatial situation (matrix) onto which layers of current data and new design guidelines are superimposed leads to obtaining overall theoretical knowledge about the design task<sup>3</sup>. During observation, experience (practice) is essential, as it allows one to concentrate in a natural, intuitive way on vital elements and ignore non-essential ones. Our body and senses prompt the mind, offering the methodology of getting to know the place – the itinerary to be taken in order to go through/work through a given Place in a competent manner. The way of perceiving a set of spatial sequences that builds a multidimensional image of a place is subject to the operation of specific filters, such as experience, but also individual aesthetic preferences based on knowledge (plus experience) and memory. As Gaston Bachelard writes, *memory remains associated with imagination*. So what we are dealing with is a dual reading of the place we encounter, covering its sensual cognitive map the elements (or areas) of which are distinguished by individual preferences and the rational knowledge of the place assisted by memory. Memory is the most ephemeral factor offering images and acoustic, haptic and olfactory experiences. Aldo van Eyck remarked that *the places one remembers and the places one anticipates become confused in the time lapse of the present. Memory and anticipation constitute the real perspective of space and give depth to it*<sup>4</sup>.

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<sup>1</sup> J. Pallasmaa in his book *The Eyes of the Skin* proves that the dominance of the visual realm is the reason behind the *mono-dimensionality* of modern architecture. Pallasmaa postulates that designing should address multi-sensory experience to render architecture that would *activate different interacting and interpenetrating zones of sensory experience*. This corresponds to the *polyphony of senses* described by G. Buchelard. However, this does not change the fact that an architect mainly refers to sight working on the basis of a handwritten drawing and a model, and supplements the images with additional sensory stimuli. Zvi Hecker has put it briefly: *I draw because I have to think* see Zvi Hecker, *Sketches*, Hatje Cantz, Ostfildern, 2012, p. 21.

<sup>2</sup> M. Risselada, *Raumplan versus Plan Libre*. *Adolf Loos / Le Corbusier*, 010 Publishers, Rotterdam, p. 126.

<sup>3</sup> It resembles the research method of Barbara McClintock, a Nobel prize winner (1983) in physiology for her discovery of transposons or “jumping genes.” She combined microscopic observation of chromosomes with meditation in the course of which the integration of the intracellular world would take place. This *feeling for the organism* demonstrated by McClintock can be well transposed upon a feeling for a place sensed by an architect. see Fox Keller Evelyn, *A Feeling for the Organism: The Life and Work of Barbara McClintock*, publishing house Freeman, San Francisco, 1983.

<sup>4</sup> A. Van Eyck, *Team 10 perimeter*, London, Studio Vista, 1965, p. 43.



Thus, reading of a place is not its rational mapping but rather its **imagining** on the basis of subjective experience<sup>5</sup>. That image – let us call it the ‘place matrix’ – gets warped as a result of superimposing on it the layer containing project guidelines, and the elements of that layer influence in various ways the elements of the place matrix. The degree of such deformations results from the individual, and thus intuitive, hierarchization of the impact of particular guidelines on the basic matrix. Architectural intuition supplements that knowledge with new elements or associations, sometimes totally unrelated to the main project task but influencing its further stages. For the House at Martha’s Vineyard designed by Steven Holl, such a locally inspired element was a fragment of Herman Melville’s *Moby Dick*, in which the author describes the habit of using a whale’s skeleton as a house frame by the Indians<sup>6</sup>.

Introduction of a projection of a new element(s) into a formed (imagined) spatial situation leads to the generation of an entirely new sequence of images with creative imagination playing a crucial role. That imagination uses intuition combined with innovativeness, generating a varied perception of the designed object. As Juhani Pallasmaa remarked, *In our imagination, the object is simultaneously held in the hand and inside the head, and the imagined and projected physical image is modelled by our embodied imagination. We are inside and outside of the conceived object at the same time. Creative work calls for a bodily and mental identification and compassion*<sup>7</sup>.

The previously mentioned hand drawing and scale model become particularly important at that point: they are a medium linking imagined spatial sequences with their material images that influence further imaginations. Holl writes: *a drawing (...) is a method of catching intuition and first thoughts, it is a technique which sets the imagination free. In the meditations associated with the initial conception of a building, its first stirring towards form, space, and light, the watercolors played a crucial role: they gave intuition a primary position*<sup>8</sup>. Thanks to drawings and models, the tangible and rationalized *forms, spaces and light* of the designed building put into the existing situation retain their intuitive character. On the other hand, they introduce an element of spontaneity and action and make it possible to naturally preserve the human, individual point of view.

### 3. Generating events

Each architectural work, an expression of author’s individuality, is, however, contained within the specifics of a given environment and cultural landscape. It, furthermore, initiates new activities of the users and generates events that supplement and enrich the status quo of the environment. The above cited Aldo van Eyck underlined the meaning of the remembered and anticipated places, Bernard Tschumi in his designs shifted the focus from *the object to the sensation of an object*, in this way *reconfiguring* the idea of an architectural design and

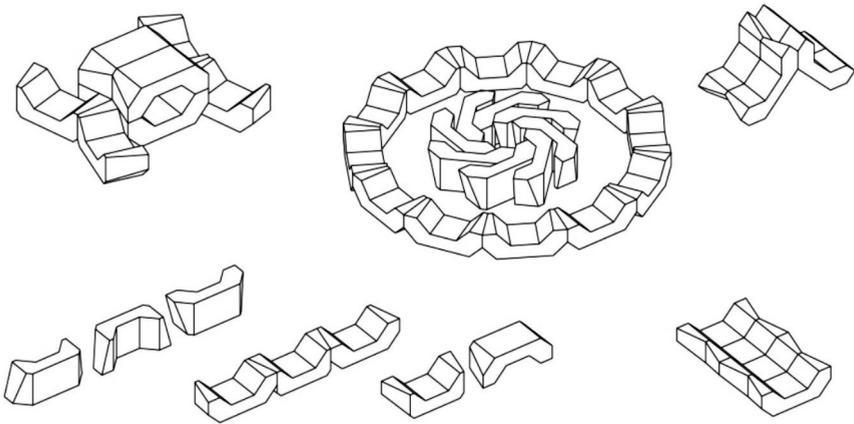
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<sup>5</sup> J. P. Sartre wrote: The image is an act of consciousness that aims in its corporeality at an absent or non-existent object, through a physical or psychic content, that is given not as itself but in the capacity of ‘analogical representative’ of the object aimed at. Sartre Jean Paul, *Wyobrażenie. Fenomenologiczna psychologia wyobraźni*, Państwowe Wydawnictwo Naukowe, Warsaw, 1970, p. 21–25.

<sup>6</sup> S. Holl, *House. Black Swan Theory*, Princeton Architectural Press, New York, 2012, p. 101.

<sup>7</sup> J. Pallasmaa, *Oczy skóry. Architektura i zmysły*, Instytut Architektury, Cracow, 2012, p. 17.

<sup>8</sup> S. Holl, *Written in Water*, Lars Muller Publishers, Zurich, 2002.



III. 2. The courtyard of the Quarter of Museums designed by Ortner & Ortner, arranged by the users by means of Enzis sculptural benches by PPAG Architects. [Source: photo of the author and <https://enzis.at/en/the-history-of-the-enzis/>, acces: 20.07.2017]

eventually posing a statement that *architecture cannot be dissociated from the events that take place within its space nor from the space itself – there is no architecture without events, actions, activity or functions*<sup>9</sup>.

In the multi-layered structure of Parc La Villette, the follies – impractical forms spread on a grid of an ideal Cartesian plane 120x120 mapped on the area and other existing structures are the *buildings that generate events* in an *anti-contextual* manner. These continuously and rhythmically perceived dis-continuous structures, which at the same time adhere to the rationality and logic of the reference points, create spatial events individually experienced by the viewer. This stands in opposition to the freedom of composition of lines of avenues, paths and trees. The third layer in this structure are green areas, the stage of events (*cultural or social transformations*). Tschumi's intention was that the events resulted from the shock sustained by the viewer in the confrontation with further and further parts of the layers superimposed on top of one another and in the confrontation with the contrasting juxtapositions of fragments and dis-continuous elements. Shattering the unity and rationality (breaking the logical cause and effect relationship cherished by modernism) and replacing the relationship with a superimposition of subsequent 'layers' is intended to provide the viewer with a great number of sensations and events. These sensations and events are partially prior orchestrated by Tschumi (through the *coordinating* structures: points and lines) and partially created by the individual moving around the elements of the park). Such multilayeredness can generate an infinite number of sequences in the participant's movements and thus, an endless number of interactions between the individual and the *images* and *events*.

If architecture is to avoid being defined by static relations between form and function, it has to be alive, i.e. include the individual in its narration. The individual has to be given freedom of movement in space, and at the same time the possibility to define and set up boundaries for those spaces with the use of methods suited to the context. The sacrosanct structure of the Vienna Quarter of Museums [MuseumsQuartier] delimited by the 18th century emperor's stables and modern buildings designed by Ortner & Ortner was supplemented with Enzis sculptural benches designed by PPAG Architects. Depending on the needs of the users, also those unrelated to museal functions, the benches can be freely re-arranged to create new space of the yards<sup>10</sup>. The ephemeral Enzis geometry provokes man to freely interpret its basic function: turned outside-down they become tables, arranged together they assume the attire of a spot for relaxation, conversation, fun or picnic. The Enzis users intuitively rearrange the sets on daily basis superimposing new looks upon the museum yards. This very humane instability of form and changeability of function customised to individual needs supplements the convention of museal space. It, furthermore, with peculiarity of form on the one hand and with an opportunity for active participation in a spatial game of not yet mastered rules, satisfies the excitation needs of modern viewers. In the centre thereof, you feel an intensive brain alertness underlying your active (and creative) attempts to participate

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<sup>9</sup> B. Tschumi, *The Architecture of the Event*, [in:] *Architecture for the Future*, Terrail, Paris, 1996, p. 35–38.

<sup>10</sup> In the years 2003–2017 Enzis colour was changed 14 times. Since 2008 the users have been able to decide what other colour they would opt for at <https://www.mqw.at/en/infoticketsshop/mq-point/mq-furniture/history/>, access: 24/07/2017 This brings to mind the interactive sculpture D-tower in Doetinchem (designed by Q.S. Serafijn and NOX L. Spuybroek), mapping the mood of the inhabitants.



III. 3. Practice Architecture, BT 5 Auditorium, London, 2011. [Source: <https://practicearchitecture.co.uk/>, access: 24/07/2018]

in the generated activity. The event develops not only kinetically but also in the brain of the shock-shaken man suddenly awaking from the state of passive perception in confrontation with an unknown situation. This is not about the aesthetic provocation but about the changes in the structure of architecture which dynamically expand its definition.

There are other examples of activity focused architectural works; among others they include the designs of the architectural studio Practice Architecture (L. Drake and P. Gormley), the authors of a stage designed at the multi-level car park in London – the so-called BT 5 Auditorium – or the design of a temporary market for the Israelis and the Palestinians under a bridge in Jerusalem (*The Meeting Point*, designed by Ch. Barlieb and TU students in Berlin). Form and applied materials no longer serve as means to increase the aesthetic value of architecture but as a means to evoke motion and activity. By their originality<sup>11</sup> the structures are intended to encourage people to cease their typical activities in space and to undertake activities going beyond the routine. The application of banal body blocks and materials shifts the focus from architecture as such to the individual who intuitively has to fill up the empty form and is not permitted to refer to the conventional experience. Location gains importance: either a typical place performs an atypical function (a building car park for instance becomes a stage) or to the contrary: a plot in the Mitte district in Berlin accommodates the Platoon Kunsthalle. This pavilion built from cargo containers is in contrast with the surrounding solid blocks of tenement houses, shops and shopping galleries. The intention of the designers of the Platoon Kunsthalle was to create a space to promote an artistic and creative subculture movement represented by actors and performers, street-art and video-art authors as well as local activists. That's why it features an open-ended structure and empty space as basic architectural material. In other words, it may be viewed as a sculpture made in the joint effort of several hundred cooperating artists. Paradoxically, their activities create similar tensions and interactions between the subculture and official culture as the contrast of the form with its surroundings. Modern man, moving smoothly from one zone to the other, more and more often cannot refrain from participation in the said tensions and interactions.

#### 4. Conclusions

The ability to share different cultural, social, psychological and physical systems and values satisfies the humane need for variety. Due to the development of global society in the era of computation, architecture is being evaluated from contradictory points of view. One and the same space will be differently evaluated and used by people from different generations or cultures. This has already been observed by Umberto Eco in *The Absent Structure*<sup>12</sup>. The relations between parts of architectural works are reinterpreted by users depending on their individual experience, cultural background and intuition.

Even if in effect of designing only the form and function is modified, it nevertheless will render eye-catching 'images' perceived unintentionally, with no involvement of the aforementioned factors. Designing, a dynamic superimposition and penetration of subsequent

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<sup>11</sup> To build the walls around the BT 5 Auditorium stage, pressed straw was used, whereas the amphitheatre form of the market in Jerusalem was nailed together with cheap square-sawn timber. *Arch+, Kapital(e) London*, issue 209 December 2012, publishing house Arch+ Verlag, Aachen.

<sup>12</sup> U. Eco, *Nieobecna struktura*, publishing house KR, Warsaw, 1996, p. 226–227.



III. 4. Platoon Cultural Development, Platoon Kunsthalle, Berlin, 2012. [Source: photos of the author.]

'layers' of rational and intuitive thinking, generates both images and events, specified positive behaviour and interactions with the users. Defining the needs of the multi-cultural world and transposition of that definition into a multivalent piece of architecture is only feasible in contact with the basic features of humanity.

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