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## IMPROVISATION. SKETCH. SYNTHESIS. SHORT FORMS IN ARCHITECTURAL EDUCATION

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### IMPROWIZACJA. SZKIC. SYNTEZA. KRÓTKIE FORMY W EDUKACJI ARCHITEKTONICZNEJ

#### Abstract

The game is a particular aspect of human activity, organized and limited by rules, with a result, though not a material outcome. In the process of creating architecture we undertake activities associated with the notions of fun and game. This also, or primarily, applies to architectural education, which, in short, free forms seeks experience and inspiration for further, serious design solutions.

*Keywords: improvisation, play, composition*

#### Streszczenie

Gra jest szczególnym przejawem ludzkiej aktywności, zorganizowanym i ograniczonym regułami, przynoszącym rozstrzygnięcie, choć nie materialny rezultat. W procesie tworzenia architektury podejmujemy szereg działań budzących skojarzenia z zabawą i grą. Dotyczy to także, a może przede wszystkim, edukacji architektonicznej, która w krótkich, niezobowiązujących formach poszukuje doświadczenia i inspiracji dla późniejszych, poważnych rozwiązań projektowych.

*Słowa kluczowe: improwizacja, gra, kompozycja*

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## 1. Introduction

In dominoes, game tiles called stones are used. Each consists of two squares with the dots, numbered from zero to six. The most common version consists of 28 stones with seven fields (empty, with one, two, three, four, five and six dots).

The game is played by two to four people, who draw their stones and place them to contact fields with the same number of dots.

In “Journey to the East” Charles-Edouard Jeanneret describes the houses in Pera – a neighbourhood near Istanbul – packed on a hill as dominoes [10 p. 90], to shortly afterwards design the *Maison Domino* – a reinforced concrete open-plan structure created in 1914 for World War I victims. This idea soon develops into the trend of rational architecture.

The game becomes part of the creative process, constituting a source of inspiration or illustration of thinking about the shaping of space.

In architecture the plot of fun and game appears very often, in more and less obvious connotations. Also, as an integral part of architectural education – enriching the process of becoming acquainted with architecture and beginning the search for one’s own creative path.

## 2. Game and architecture

Johan Huizinga in the classic work *Homo Ludens* [8] – summarizing the formal qualities – characterizes the game as a free frivolous action taken consciously outside “ordinary life”, absorbing the participant intensively and completely.

The need to play is an integral part of the existence of many beings, including animals. However, as a consequence of its undoubted importance to human culture, the game is finally understood not as a biological but a cultural phenomenon.

Games [6 p. 128–130] are often mistakenly equated with frivolity and contrasted to seriousness.

Roger Caillois [4 p. 9–10] characterizes the notions of play and game, highlighting six basic characteristics of the first:

1. freedom – participation is not obligatory;
2. separation – organized within limits in space and time, defined by the rules in advance;
3. uncertainty regarding both the course and outcome;
4. unproductivity – creating neither material results nor new elements of any kind except for the exchange of property among players;
5. governed by rules under principles, sometimes suspending ordinary laws or establishing new legislation for the duration of play;
6. make-believe – a sense of being in an alternate reality or under conditions in opposition to real life.

Games take place according to fixed principles and in an orderly manner, within the limitations and rules defined in space and time. They promote the integration of groups around a common secret and emphasize autonomy.

Both from the definition and further discussion of the theorists, total freedom and absolute lack of seriousness is attributed to fun and games. Consequently, they are in opposition

to what is real. Whereas the plastic arts are inextricably linked with matter and limitations closed in a material form. Furthermore, in the very substance of the game lies unproductivity, which distinguishes it from work and art. [4 p. 5] On the other hand, Gadamer formulates the concept of “real game” [9 p. 21], which manifests itself in art with seriousness, remaining in the sphere of fun at the same time. The work of art transforms play into a specific structure which affects the experience of its audience. A truly successful work of art is simply stunning. It is never just a recording of something already existing, but always introduces a new value [9 p. 23].

Architecture is a form of art in which the artistic factor is often treated as secondary, because it is subordinated to the requirements of the program (such as function or technology). However, in a successful manifestation of architecture the program is fully integrated with the artwork and this unique combination gives a chance to achieve results impossible to reach in other areas.

Hans Georg Gadamer writes about architecture [6 p. 221]:

“It emerges as an artwork only when, during its use, something wonderful shines forth, as with everything that is beautiful. The experience causes us to pause in the midst of our purposeful doing, for example in a room of a church, or in a stairwell, when suddenly we stand there and remain entranced”.

If a game is an activity not related to material benefit and specific profit, an architectural object – as a result – cannot be referenced directly to it. Although “architecture is the masterly, correct and magnificent play of masses brought together in light” but not necessarily in the context of the definition cited above.

The case is different if we refer to the very process of creation and its components.

According to Andrew Pressman, the design process involves interweaving thoughts and sensations, which tend in an established direction [11].

Paul Klee visualizes the creation of a project, starting from the moving point which forms a line that forms a moving plane which finally moves creating cubic forms [1 p. 283].

Such a glance at the creative process allows a broader interpretation of its character and leads us directly to analogies with play or games. It is in the process of creation, and then the perception of architecture, where the game is played.

Today, in a time of growing importance of the interaction of various factors: natural, cultural, economic, technological, information, etc., architecture can be understood as a team game performed on a ground of combined restrictions [3 p. 4].

Regardless of the assumed view, the game of design is more than the (unproductive) fun, in the end: “the main rule governing life is a game” [5 p. 138].

### **3. Game and architectural education**

The Faculty of Architecture was founded in 1915 as one of the four departments of the newly established Warsaw University of Technology (then: Warsaw Polytechnic). The training program was built on the idea of the comprehensive and interdisciplinary nature of the architectural profession.

“The curriculum that we draw here aims to educate architects to the highest range of this concept – wide artistic culture and serious expertise are its main guiding threads, carried out through an overall distribution of studies and in individual subjects” [14].

The teaching method introduced at the time the School began and developed in the early years, and identified the profile of the Warsaw Department, which was defined through the coexistence of technical problems, and artistic and historical topics.

The structure of the program allowed the professors to pave individual learning paths, which were often based on their own professional experience.

In the design classes, from the very beginning, the project tasks were embedded in real circumstances, so the assumption was to simulate true conditions. The aim for the students was the result, which, after the refinement and necessary adjustments, could become the basis for construction of the building (during architectural design classes) or spatial structure (in urban design classes). Within the framework of the classes, some professors customarily organized the simulation of meetings reflecting the true situations in an architectural office or on a construction site.

The nature of architectural education naturally promotes comparisons with the process of game or play. Substantially, any kind of design classes meet the conditions specified by Roger Caillois:

1. studying, and thus participation in the classes is voluntary;
2. conditions and procedures for the creation of the project are defined by the rules laid down in advance – both those resulting from the specifics of the course (theme and content scope, schedule, dates) as well as the overall architectural (functional requirements, formal regulations and those resulting from law);
3. both detailed course of the process and the final result of the work is unknown;
4. the design work of the concept phase is characterized by the absence of a material result – in the form of a building; sketches, drawings and boards remain abstract representations of the possible effect;
5. during classes, for teaching purposes, specific regulations are introduced, which are sometimes inconsistent with common regulations or law;
6. the very nature of the design classes is to pretend certain circumstances or conditions, in particular those relating to the implementation potential of the project.

But, what seems to be the most interesting from the point of view of the subject of this article, are certain forms of architectural creation accompanying the design process (both the “true” and the one which is simulated in the classroom), or existing as a separate element supporting thoughts about space.

The traditional form of teaching problems related to the history of architecture is the use of the draft synthesizing content provided in the form of drawings and photos. At the FA WUT this applies to the classes of the History of Common Architecture (sem. 1 and 2), Polish Architecture (sem. 3 and 4) and the History of Urban Construction (sem. 5 and 6). In the process of creating sketches we find analogies to the types of games defined by Caillois [4 p. 18]. The strongest – in the group of imitating games (mimicry), where the drawing would be a picture of reality highlighting the most important characteristics of the source image (view, projection, section, plan, scheme). And in a synthetic form so frugal that it almost approaches an illusion – also as a part of the process in an illusive game (ilinx).

The sketch accompanies the creator at every stage of the design process. Both as a projection of ideas, as well as more detailed illustration of the elements of the architectural object.

The need for visual communication of thoughts is reflected in the exercises usually accompanying classes on architectural and urban design. In the course of work on a project, some approximations of the ideas arise. So noncommittal that they do not necessarily surrender to digital modelling, which requires a series of precise decisions to be taken.

Practising skills of concise illustration for solving the design task, are a Faculty of Architecture WUT element of the introductory classes to urban design.

Elements of Urban Composition (EUC) appeared in the curriculum for the first time in 1952 in the form of lectures given by Kazimierz Wejchert, in which the issues of psychological analysis of optical and spatial phenomena were discussed. New insights enabled the implementation of the method of urban composition based on the perception of the spatial structure by the observer and involving the creation of spatial compositions based on the conscious reasons resulting therefrom.

In 1959. Elements of Urban Composition course was extended to weekly two-hour seminars involving short tasks developed by students in the form of conceptual sketches, including abstract and concrete compositions, embedded in given locations.

These classes – currently implemented as a project – consist of solving simple compositional and planning tasks, beginning from illustrative themes (e.g. presentation of an existing space with specific characteristics), through abstract (e.g. compositions of volumes, and spatial arrangements creating a mood) to compositions with specific functions and spatial arrangement (e.g. interior design or a combination of urban interiors).

Students solve the tasks during class, hence it is important to be able to begin a previously unknown topic, to have the skill to improvise and almost immediately propose a solution presented in a very synthetic form.

EUC classes are a manifestation of a freer approach to the serious issue of design. They definitely fulfil the conditions attributed to games. After all, they take place according to fixed rules and in an orderly manner, within the limits and rules set in space and time. Additionally, they contain an element of competition and promote the integration of the team around a common task.

In the group of foreign students at the Faculty of Architecture WUT we implemented – in a similar form – classes on composition and interior design. During the seminar titled “Interiors” students prepare individual concepts for architectural and urban interiors.

In this academic year we also introduced an exercise offering a collaborative design solution: the Architectural City Game.

The subject of the exercise was to design a city game, with the leading theme regarding the issues of architecture and/or urban space in Warsaw. The group comprised foreign students – participants in bilateral exchanges and Erasmus + program from Belarus, the Czech Republic, France, Spain, South Korea, Germany, Taiwan, Italy and students of UDM from the US. Work took place in seven international teams, whose task was to present an original idea and develop an initial scenario for the game. The basic premise of the exercise was to undertake discussion about the possibility of introducing the abstract strategy of a game into a specific urban context. An important aspect of the discussion was how to express the issue of architecture and introduce it in the conditions of the game. The specificity of the topic required a prolongation of the task to two classes. The result was seven different proposals aimed to separate types of players and based on different assumptions.

#### 4. Summary

In architectural education an element of fun is an important complement to the teaching program. Simulation of real or imaginary conditions helps to understand the processes occurring in space and provokes its own creative pursuits. Not burdened with the weight and the risk of execution, student concepts present a fresh, open approach to the formation of architecture and reality in general. Especially in short, concise forms, there is a chance for free thought to emerge, which may find continuation much later in mature projects.

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