

FORMAL - ESTHETIC CHARACTERISTICS OF CONTEMPORARY STUDENT HOSTELS

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Abstract. *The paper analyzes formal-esthetic characteristics of structures of contemporary student hostels. The focus of research are the specific characteristics of shaping of form and treatment of facades of student hostels. Several tendencies of contemporary architecture applied in designing of student hostels was observed and researched: recycling of "old forms", pattern, avant-garde and experimental design and "new modularity".*

Key words: *contemporary student hostels, pattern, prefabricated building, modularity, avant-garde and experimental character.*

1. INTRODUCTION

The paper will analyze formal-esthetic characteristics of individual structures of student hostels, irrespective of whether they are standalone or are within a complex, i.e., a campus¹. The focus of research is on the specific characteristics of shaping of form and treatment of the student hostels façade. Only newly constructed buildings, built at the turn of 21st century will be taken into consideration. Starting from the esthetics of contemporary architecture and principles of technological and environmental sustainability, specifics in designing of student hostels structures will be researched. It is assumed that the contemporary designs rely on simple and rational, already used forms, but also in the new, innovative and technologically contemporary way. Details are minimized, and their possible usage is in the context of forming the unitary and clear concept. In the designing pro-

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¹ A **campus** is traditionally the land on which a college or university and related institutional buildings are situated. Usually a campus includes libraries, lecture halls, residence halls, student centers or dining halls, and park-like settings. The definition currently describes a collection of buildings that belong to a given institution, either academic or non-academic.

cess, "recycling" of most diverse ideas is used, from using patterns, to modularity and mobility, and strong style relations to the previous periods in a architecture.

The analysis itself, conducted in the paper, consists of several abstracted tendencies of contemporary architecture, applied in designing of student hostels designing at the beginning of 21st century. Those are defined as:

- Recycling of "old forms"
- Pattern
- Avant-garde and experimental design
- New modularity

2. RECYCLING OF "OLD FORMS"

Recycling of "old forms", but with implementation of contemporary materials and architectonic concepts is one of the general traits of contemporary architecture. Simple and humble which by the design of their facades evoke the style of predecessors, are analyzed in a contemporary and inventive way. The used materials are technologically advanced, and very often they represent complex concepts of sustainability in contemporary architecture. The example of the student hostel "The Zielony Graduate Student Village" in Israel was displayed in figure 1. The entire village echoes the architecture of public housing complexes from the 1950s and 60s. The simple prismatic forms bring the contemporary interpretation adapted to present time.



Fig. 1 The Zielony Graduate Student Village, Haifa, Israel, 2003.
(Bar Orian Architects + Schwartz Besnosoff Architects)

In the previously presented example, historical relation is irrefutable. A completely different approach is the contemporary treatment of the façade of the known forms of structures. Special role in such approach has the implementation of contemporary materials and technologies in design of façade surfaces. Recycling of "old forms" can be used as a way of fitting into the existing concept, but according to clear models of international style, figure 2.



Fig. 2 Student residence, Paris, France, 2007. (LAN Architecture) - left
Student dormitory, Heidelberg, Germany, 2009. (Nickl & Partner Architekten) - right

3. PATTERN

A special esthetic property of architecture from the beginning of 21st century is pattern, especially in design of the facades on buildings of simple forms, where technologically contemporary materials and designs are implemented. Formulation of the concept "pattern" is related to the architect and theoretician Christopher Wolfgang Alexander, and it has had its continuity in architecture, lasting for millennia. In the contemporary interpretation, pattern assumes a completely new dimension. New technologies have enabled architects to develop sophisticated patterning techniques. This is epitomised by the expressive possibilities now available to the building envelope: smooth geometries, tessellation, material textures and layers, such as solar shading. [12]

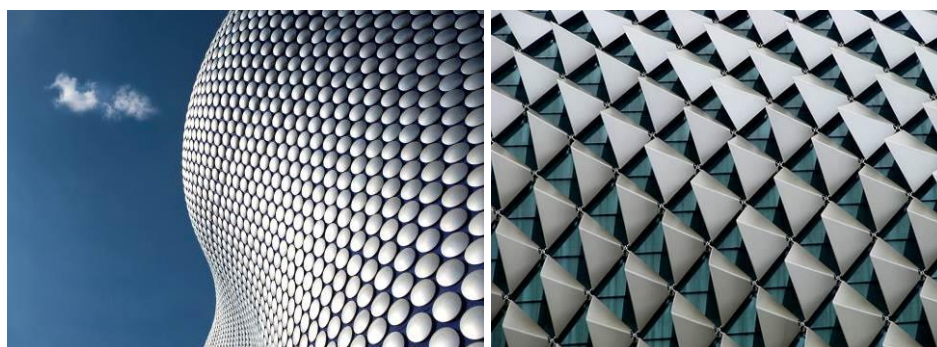


Fig. 3 Contemporary architectural pattern

New patterns applied in designing of contemporary student hostels bring about special quality to the simple and rational forms of structures. In figure 4 are presented the student hostels with the facade pattern. In structure in the figure 4 – left, there are independent elements, in the form of panels, forming a pattern layer on the façade. In figure 4 – right, the windows and façade panels in the same plane form a pattern.



Fig. 4 Student housing "Les Prunais", Villiers-sur-Marne, France, 2012.

Student Housing, Utrecht, The Netherlands, 2008 (Architectenbureau Marlies Rohmer)

Simple patterns can be implemented in complex kinetical facades, which provides other functional uses, apart from the esthetical. Pattern, applied on the façade of the student hostel in Ljubljana (Slovenia), is the integral part of the panel of kinetic façade covering the balconies of student rooms, figure 5.



Fig. 5 Ljubljana University Housing, Slovenia, 2006. (Bevk Perović Arhitekti)

Just to what extent such approach in design of facades is present in contemporary architecture is demonstrated by two competition projects for the same buildings, University campus Sonce in Slovenia, figure 6.



Fig. 6 Competition proposals for University campus Sonce, Koper, Slovenia, 2010. Dekleva Gregorič Arhitekti – left; Bevk Perović Arhitekti - right

4. "NEW MODULARITY "

Contemporary architectonic concepts are based on economic and environmental sustainability of structures which is achieved through application of modular elements, flexible functional design, application of contemporary technologies and environmental building principles. The concept of modularity and prefabricated building in the 20th century obtains a new interpretation at the beginning of 21st century. Contemporary interpretation of this idea is used both in designing and in construction of student hostels. There are numerous examples of prefab building, based on the elements which were not primarily intended for use in construction engineering.



Fig. 7 Container ship and Keetwonen recycled container student housing in Netherland

Regarding the enormous production of ship containers (figure 7 –left), which were adjusted to most varied international standards, from dimensions to the method of transport, their usage become interesting for construction of various architectonic structures. The student hostels fully conform with this idea. Such designs are avant-garde, economically and environmentally sustainable, rational and cheap, modular and prefabricated. The idea originated in the Netherlands (figure 7 – right), and quickly spread across other countries of the EU, and the rest of the world. In figure 8 is presented a student hostel in France, completely constructed of ship containers. [7]



Fig. 8 "Cité A Docks" student housing in Le Havre, France, 2010. (Cattani Architects)

The concept of new modularity and prefabricated building obtains a special esthetic dimension through the project "Qubic Houthavens" in Amsterdam (Holland), presented in figure 9. The buildings were constructed of ship containers, but their original appearance is concealed with several types of plastic modules, figure 9 – right. [11]

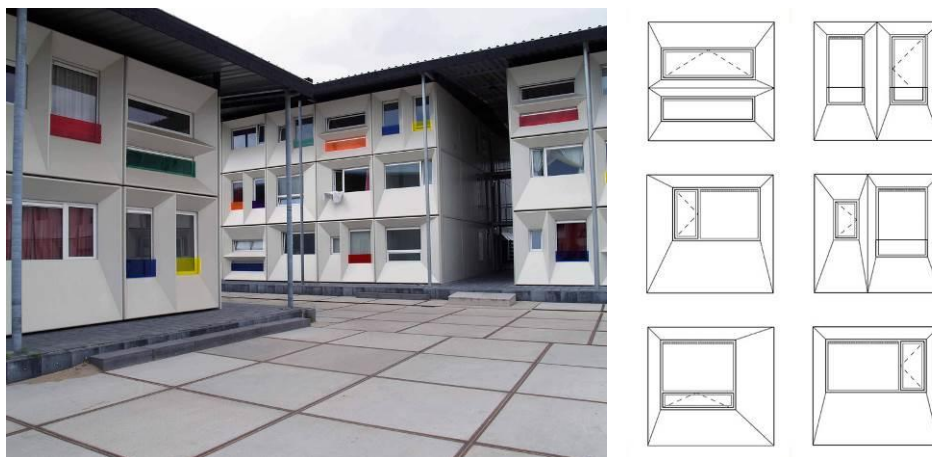


Fig. 9 "Qubic Houthavens", Amsterdam, The Netherlands, 2005. (hvdn architecten)

The system of student housing in Belgium, called "Hub 01" is based on three principles: mobility, privacy of student life and environmental design. The basic material for construction were the old ship containers. The walls of the container are covered with various plants, they have integrated solar panels and wind power generators, figure 10.[3]



Fig. 10 "Hub 01", Kortrijk, Belgium, (dmvA Architecten, A3 Architects)

5. AVANT-GARDE AND EXPERIMENTAL DESIGN

The student hostels are intended for the age structure of users of 18-26 years, who will live in them 4-6 years. Regarding the age structure, relatively short period of living and the intellectual level of the users, student hostels are suitable for avant-garde and experimental moves in architecture, from the building esthetics, to new concepts of housing.

Avant-garde and experimental character of designing of student hostels is a tendency which represents an imperative and duty, regardless of the time context.[5]

Development of contemporary materials and application of computers, almost completely cancel technological and formal limitations. The designers of contemporary student hostels have a great freedom and obligation to give a special contribution to the development of new architectonic concepts. Guided by this idea, the student hostels presented in figure 11 were designed. [10]

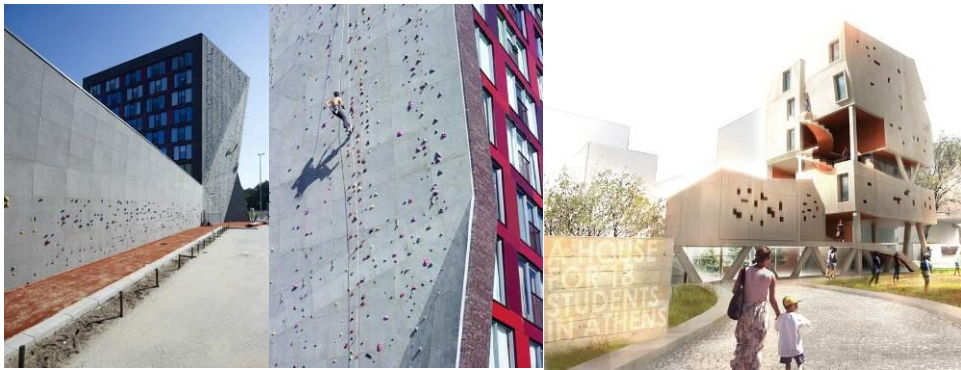


Fig. 11 New Student Housing at the University of Twente - High rise with climbing wall, 2009

Student housing, Athens, Greece, 2009. (Nadau Lavergne Architectures)

A special convenience is constituted by the fact that most of the buildings are in the campus complex, they can be standalone buildings, so there is little functional and formal limitations in designing.

Contemporary interpretation of avant-garde architecture comprises environmental aspects of designing. Planning of insolation, greenery, heating and cooling methods and recycling is paid due attention. In figure 12, there is a building in Austria whose avant-garde design of the façade stemmed from the insolation analysis, according to energy efficiency principles. [1]



Fig. 12 The new college campus in Warrnambool, Austria, 2009

6. CONCLUSION

The analysis of formal-esthetic characteristics of structures of the student hostels built or designed at the turn of 21st century yielded the specific characteristics of shaping of form and treatment of facades of student hostels, according to contemporary tendencies of contemporary architecture. The observed characteristics can be placed in several clearly defined tendencies of design of student hostels: recycling of "old forms", pattern, avant-garde and experimental design and "new modularity". The mentioned tendencies are specific for contemporary architecture in general and based on principles of technological, environmental and economical sustainability.

The contemporary designs formally rely on simple and rational, already used forms, but in a new, innovative and technologically contemporary way. The accent is on the clear concept and unambiguous time context.

Usage of the pattern is a continuity of an idea which lasts throughout building history. In this case too, the accent is on the contemporary interpretation, multi-functionality and clear placing into a contemporary time context.

Economic and environmental sustainability of structures which can be achieved through application of modular and prefabricated building, flexible functional design, application of contemporary technologies and environmental building principles. In architecture of contemporary student hostels this type of construction obtains new concepts and interpretations. There are numerous examples of prefab building, based on the elements which were not primarily intended for use in construction engineering, such as usage of ship containers

Avant-garde and experimental efforts are characteristic of every period in architecture, and they represent one of the basic preconditions for development and progress. In the concrete case, regarding the type of structures and users of buildings, such approach in designing of student hostels is an imperative and obligation.

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FORMALNO ESTETSKE KARAKTERISTIKE SAVREMENIH STUDENTSKIH DOMOVA

U radu su analizirane formalno estetske karakteristike objekata savremenih studentskih domova. Fokus istraživanja je na specifičnim karakteristikama oblikovanja forme i obrade fasada objekata studentskih domova. Uočeno je i istraženo nekoliko tendencija savremene arhitekture primenjivanih u projektovanju studentskih domova: reciklaža "starih formi", primena mustre, avangardnost i eksperimentalnost u dizajnu i "nova modularnost".

Ključne reči: *savremeni studentski domovi, mustra, montažna gradnja, modularnost, avangardnost i eksperimentalnost*