

MINIMALISM IN CONTEMPORARY ARCHITECTURE AS ONE OF THE MOST USABLE AESTHETICALLY-FUNCTIONAL PATTERNS

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Abstract. *Minimalism in architecture which tends to reduce forms is becoming a more common case in practice. The aim of the research is uncovering its influence in contemporary life and defining relation of this phenomenon to the reality. According to this task two hypothesis are formed at the start: "minimalism in architecture is the same as a simplified architecture" and "minimalism is a style of architecture". After analyzing influences and characteristics of minimalism in contemporary space including certain examples from practice, and some case studies of the architectural achievements based on minimalist ideas, research results are concluded and defined according to previous hypothesis. The conclusion includes understanding of minimalism as a way of thinking and a life style.*

Key words: *minimalism, simplicity, architecture, art, aesthetics, form and function*

1. INTRODUCTION

Science and technology spread rapidly nowadays on a global scale, therefore contemporary architecture delivers some kind of new international planning, design and shaping principles. Shaping the approach to architectural space surely represents the need to achieve perfection regardless of the diversity of stylistic trends and aesthetic orientation through the history. The view of what is "perfect" or generally acceptable has obviously evolved nowadays in the general "noise" and the speed of modern life so that another principle becomes acceptable. Sheltered from the visual noise of the new age, designers are looking for the straight lines, flat and clean surfaces, elementary geometric shapes and reduced color range.

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The aim of the research is focused on recognizing the reasons for accepting this global phenomenon [1]. The research results should show whether it is a temporary occurrence or entirely new style in architecture. It all depends on what the analysis of the characteristics of the given examples shows. From this premise, two hypotheses are formed: Minimalism in architecture is the same as simplified architecture and minimalism is a style of architecture. According to this, scientific methods are thus: analysis of minimalism features and their impact in architecture, case study of representative examples from recent history and synthesis of the results through classification of minimalistic idea types.

2. IMPORTANCE AND CHARACTERISTICS OF MINIMALISM

One of the crucial minimalism issues is: How much is it possible to rationalize, simplify and reduce the form subtracting from its shaped character, without the form losing its purpose, and identity? Minimalism is perceived as a new lifestyle which obviously becomes acceptable for the part of wealthy population through the eighties of the twentieth century. By filling their living space with unnecessary objects, people have had become victims of the mass consumerism. Mass cultural products lead to an overload of visual effects, so people now search for an oasis of peace in the cluttered and "visually-noisy" space.

The aspiration to essentially reduce forms could be considered as exhortation of the industrial manufacturing and design. The usage of the basic shapes, monochromatic and primary colors palette, simplified lines, flatten and clean surfaces replaces decorative plastics with simple and reduced design. These forms are also suitable for modular fabrication. Therefore, industrial manufacturing is favored at the expense of handmade production in every way. Industrial development, which has had enormous influence in the middle of the twentieth century, could be considered as a basis or the new aesthetic-architectural expression. One of the reasons why today's minimalism is purest than ever before, is actually in technology and material innovation and development. Minimalist aesthetics could be also considered as suitable for other commercial purposes. Design of empty and reduced space focuses consumer's attention on the presented commodity [2].

Minimalist ideas in art and architecture could be understood as a new way of thinking and a new lifestyle. This movement tends to neglect non-essential elements and at the foreground thus emphasizes the basic elements of a complex system. This phenomenon, psychologically viewed, can produce a perceptual therapy which provides shelter from the daily life jam and offer a relaxing paradise through simplicity-elegance. French writer Antoine de Saint Exupéry, in his description of perfection says: "Perfection is achieved not when there is nothing more to add, but when there is nothing left to take away." [3]

Officially there is no adopted definition of minimalism. It is very difficult to give a general definition of minimalism because actually there are no precise established rules, which help to identify what is and what is not a minimalistic design [4]. There are many attempts to define the minimalist design in architecture and each case can be described as an individual approach of its author:

- Minimalism is simple expressing of comprehensive thought - Donald Judd
- Minimalism is the pursuit of the essence of things and not for their occurrence – Massimo Vignelli.

- Minimalism involves "reducing architecture to its most basic qualities of space, light and weight"—Peter Murray.
- Essentially it is reductionism in architecture that encompasses simplicity, linearity, muted color palettes, sophisticated finishing and contemplation—Vice Pip.
- Perfection and quality that the object is achieved when it is no longer possible to improve subtraction and when all the components and details are reduced to the essence—John Pawson [5].

The way in which the observer interprets a particular work, or what emotions it causes can be a landmark towards the creation of minimalism, which involves a certain level of subjectivity. However, undoubtedly some of the characteristics can be attributed to this style which involves a somewhat higher level of generality, such as: minimal imagery, geometric strictness, repeating elements, technical precision and materiality, monolithic and simplicity of design, the distortion of proportions, showing the structure in the foreground, self-reference, pure expression without referring to historical allusions [6].

New trends in architecture are turning to emphasize less materiality and more sensibility and spiritual aspects of space. Nowadays, as dominant subject of art and architecture, new materials become: "air, gas, fire, light, smell, magnetic forces, current and electronics too." [7] The imposed question in this case, is: "Is the materiality in architecture necessary material?" [8] Non materiality is expressed through uncovering material nature, light, shade, shape and color. Important characteristic of minimalism is the way in which the materials are used, because they shape the space and express its essence. "Materials in minimalism represent indirect speech and voice of silence." [9] Therefore they reflect a non-materiality. The principle of non-materiality stimulates aesthetic experience through journey to "irreducible minimum", where minimalism tends.

Lighting has a substantial role in the shaping of aesthetics. Volume and mass in shape of space are highlighted therefore exceptionally complex effects are achieved. [10] With the help of lights, the capacity for material transformation enable its "movement" thus the material builds its expressing character through the play of light and shade. Architecture of minimalism treats lights as a material or one of new material expressing media. "Light is uncatchable and in that sense has the ability to give life to materials and models the soul of an object" [11]. Lighting contrast is shading which also creates spatial transformation and becomes important part of the form. The way of light rays falling on the surfaces emphasizes mass of objects and its own emptiness. The final goal of minimalistic design is to find a balance between brightness and weight and on the other hand the gaps and fullness of objects, but also to find the balanced relationship of unequal parts. Often, in use is cold white light for artificial decorative and diffuse lighting. Ian Moore said: "The most important aspects for the place where we live in, is the light, space and ventilation" [12].

Usage of elementary geometric shapes is the base of minimalist composition, therefore only one basic shape or a few similar as well as orthogonal forms are in use. Basically, contemporary concept of shaping in an interior uses spatial simplicity, white color in conjunction with nature and soft colors and textures and very often high-tech products. In some way, reduced language of architecture is identified by the electronic communication era. Interior space usually has industrial design elements or ultra-modern style in lamps, stairs, furnaces etc. Color or texture, literally, does not produce equal effects and experience as form silhouette but it is a mighty factor which shapes character of the form. Hue-range language is expressed through interaction between color and form. Wide range of colors is unbecoming in the Minimalistic design, therefore the basic coloristic range is

often white (plaster), gray (raw concrete), clean surfaces and so on. A special place in design is occupied by the white color as the basics for solving the lighting problem. Pure whiteness is the best expressing medium of form and material character, indicating the emptiness and it is the symbol of spatial universality. "The use of color in architecture means addressing the colorful range in the direction of architectural volumes and their details. Thus color, through interaction with the form, creates the proper signs which make color palette a language of architecture" [13].

3. JUXTAPOSITION: SIMPLICITY AND MINIMUM

Defining the minimalism as one of the aesthetic styles or the artistic direction may not be completely correct because of different interpretations of this term. According to Bertoni, "Minimalism is not a style it is a behavior, way of existence and fundamental reaction to noise, mess and vulgarity. This is aspiration to essentiality, but not to their appearance" [6] [14]. There is actually no generally accepted definition. Although minimalism involves the aforementioned properties, minimalism in architecture from the spectators or creators point of view can be anything that causes feelings close to the minimalistic art [15]. The idea of minimalism has a broader meaning, in spite of possibility of concluding that the minimalism is simply reduction and simplification of form. The term minimalism implies a modernist goal of this phenomenon to fundamentally simplify image and sculpture at its essence and to the soul of geometric abstraction [16]. Minimum should not be taken as a basic value therefore the term "irreducible minimum" is introduced. It expresses a threshold to which minimalism aspires. Although this phenomenon implies order, control and discipline, we cannot say that this is a synonym for a sterile or boring composition. Simple form does not always produce a simple experience.

Simple and minimal are terms which are often used in design so the question is: what is the nature of their relationship. Are these terms synonyms or is there a crucial difference between them? Simple and minimal could have a similar meaning and very often that is the basic understanding, in spite of the fact that terms have different meanings [17]. Design of minimalism is a reaction to complexity, to brutal design and possesses the qualities which could not be classified always as simple design.

Actually, the simple ideas are often the best ideas, if they correspond to the architect's task [18]. Most cases confirm that the client's ideas are very complicated. The client's way of thinking, which will guide the architect in solving problems, is very important and a question is imposed: Which is the simplest and most effective way to accomplish this task? Subtracting or sloppily simplifying complex ideas at start could eliminate vital information of a compound system. Although the minimalism is understood as "simple expressing of comprehensive thought", minimalist architectural proposal is in accordance with this definition but on the other hand "roughly" simplified (non-minimalist) solutions could have some kind of superficiality in a decision making process [19]. That thought could be identified with the use of "simple" in everyday speech where this term does not always have positive connotation, it could be understood literally, without a higher or deeper meaning. Minimalism in architecture implies perfection and quality reached by a subject if the upgrading is not possible by subtraction and when all the components, parts and details are essentially reduced [20] (Fig. 1).



Fig. 1 Simple design and minimal design

(Source: <http://www.finehomebuilding.com/readerproject/2011/07/29/cedar-shed-for-mower>,
<http://www.archdaily.com/118906/house-in-leiria-aires-mateus>)

Understanding of minimalism is in a close relation with premise “form follows function”, otherwise ideas of minimalist forms would be insignificant. Random or arbitrary understanding of the term “simplicity” at start eliminates equality with the term “minimalistic”. In spite of this, seemingly similarity between terms can be defined by their relation: Minimalism = Functional + Simplicity.

4. CASE STUDY OF MINIMALISM IN ARCHITECTURE AT 21. CENTURY

1. Manuel Aires Mateus: House in Leiria, Leiria, Portugal, 2010.

Brothers Manuel and Francisco Aires Mateus achieved almost perfect archetypal house shape with this project, reduced to a complete minimum. The main part of the house is the central space running through the three-floor elevation which shapes and refract light. Atrium walls are materialized with glass through entire height in order to get better lighting performance. Unconventional, final surface treatment is provided by painted mortar created by special waterproof material. Other than usual, this material does not need additional maintenance, only periodical paint job. Interior and exterior are interwoven with each other so that clear boundary between these two aspects cannot be defined (Fig. 2).



Fig. 2 House in Leiria, absolute minimalism - limit of visual aesthetics

(Source: <http://www.archdaily.com/118906/house-in-leiria-aires-mateus>)

2. Tadao Ando: 4x4 House, Tarumi-ku, Kobe, Hyogo, Japan, 2003.

Project “4x4 House”(Fig. 3) is adapted very ably to the location requirements. By creating a couple of identical shapes the whole composition represents some kind of a gate to the sea expressed in the material contrast of wood and concrete. According to the architectural thought, hierarchy is a tool for expressing the form and establishing priorities according to their level of importance. The hierarchy is established by setting the highest to aside therefore this element has higher priority in design sense because this produces a visual illusion. This box on the top of the building actually looks higher and broader than the others. At the same time, the highest box is logical expression of starting with basic form. It represents as well the contrast which provides movement and asymmetry of the whole symmetric composition [21].

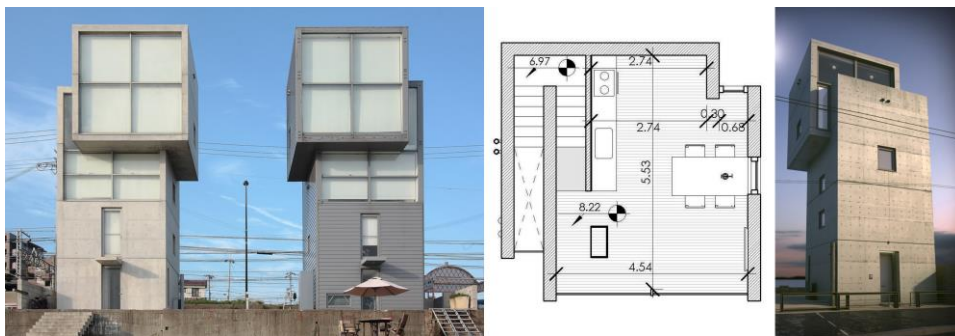


Fig. 3 Gate to the sea; third floor plan: minimalist function; entrance to the house
(Source: <http://www.architravel.com/architravel/building/4x4-house-ii/>)

3. Sou Fujimoto Architects: House N, Oita Prefecture, Japan, 2008.

Building (Fig. 4) is created with three independent cubical shells placed one inside the other, which unify interior and exterior space. Rigid boundary between the street and the house is not defined. The outer shell shaped the courtyard and the parking area with vegetation, but on the other side the kitchen closed off with the transparent glass surface

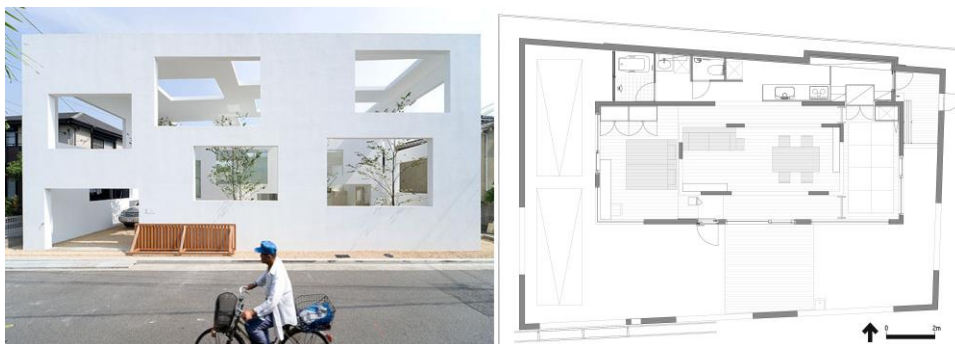


Fig. 4 Outer cubic shell; main floor plan: minimalist-fluid space
(Source: <http://www.archdaily.com/7484/house-n-sou-fujimoto>)

is placed. The middle shell defines only inner space, functional zones which include bedroom and entrance hall. The third shell is the most private space and includes a living room, dining room and kitchen. Every zone is at the same time part of inner and outer space which is enabled by large orthogonal openings of each shell. The level of privacy is increased according to a deepness of the shell hierarchy [19].

4. John Pawson: House in Germany, Nordrhein-Westfalen, Germany, 2003.

The design of the family house in Germany (Fig. 5) as two-level building, includes one completely open floor, while the other is half-underground. Terrain slopes from the street direction which produces one-level effect. One of the article headings of John Pawson's house project was "simplicity and complexity" and this affirms Donald Judd's definition of minimalism: "Minimalism is simple expression of comprehensive thought". Pawson's work is described as minimalistic and their perception is an attempt to change everything, until now. According to Pawson, the idea of minimalism is to eliminate mess of everyday life. He actually claims that by removing the mess, we can find satisfaction in everyday life [5].



Fig. 5 House in Germany, Nordrhein-Westfalen - reduced cubic form
(Source <http://www.johnpawson.com/works/nordrhein-westfalen-house/>)

5. Campos Leckie Studio: Zacatitos 04 House, Baja Kalifornia Sur, Mexico, 2013

Building form is a reflection of the aspiration to an irreducible minimum. White, flat and monolithic surfaces direct spectator's focus on surrounding landscape and provide contact with environment without barriers. Floors and stairs, which look like cliffs spreading to an open space, are materialized by a monolithic concrete base. This base provides a natural connection with the surrounding rock-desert landscape. Monolithic wall perforations enables lighting of the hall, therefore light takes part in shaping the space. The reason why the space is reduced to a minimum is to experience the space with more sensitivity, through this play of light and air. Living room space is under the open sky because it is placed in some kind of open atrium and in a shadow of a big, massive wall (Fig. 6).

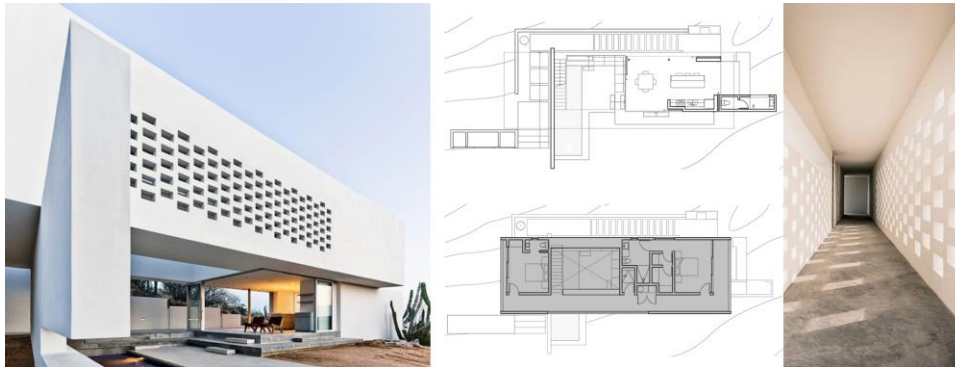


Fig. 6 Perforated main wall of cubic shell; main floor plan - first floor plan; light game
(Source: <http://www.archilovers.com/projects/132648/zacatitos-04.html>)

6. Peter Zumthor: Kunsthaus, Bregenz, Austria, 1997

The building has a completely reduced form and it is placed on the Constance Lake lakeside. The light collected from glass facade is distributed throughout the gallery. Construction is also completely minimized and reduced, since the whole structure is carried on by only three walls (Fig. 7).

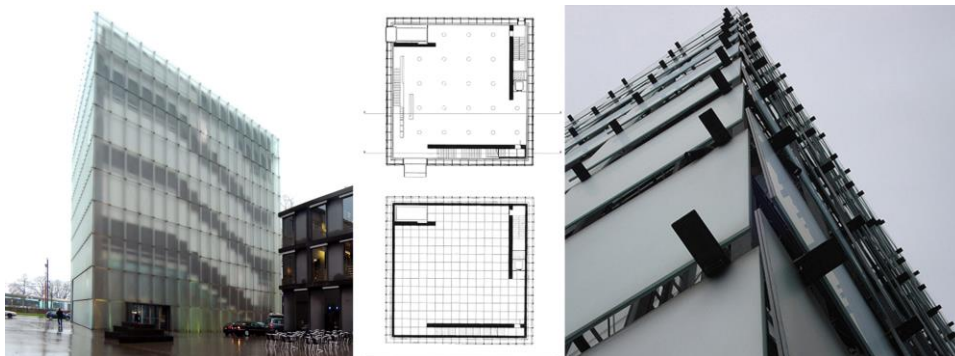


Fig. 7 Boxy reduced form; first and galleries floor plan; glass facade detail - texture
(Source: <http://www.archilovers.com/projects/132648/zacatitos-04.html>)

One of the most important building features is the inner straight stairwell on a glass facade. Especially at night time, this part of building shapes the facade in a different way. Floor plans sensibility uncovers fusion between art and architecture, where every architectonic surface is adapted to artistic purposes. A mix of diffused and natural lighting and a neutral material palette brings enough space to a mutual expression of contemporary art and architecture in such a way so as not to confront each other.

7. Ikimono Architects: Static Quarry, Maebashi, Gunma Prefecture, Japan, 2011

This building should be observed as a small city, created with a singular household. This is in many cases typical to Japan. Author's unique perception of architecture and city implies understanding of private and public space interaction, so that urban life enters into a private, residential and reflects the external world. The form completely follows this perception and with its full and empty parts the facade represents both private and public space respectively. Every residential unit has a roof terrace. The atrium space includes a bamboo garden which represents a common public space and this space has a role as some kind of sanctuary. Every apartment has a window looking onto a garden and this invites inhabitants to that part of space which belongs to no one and everyone at the same time (Fig. 8).



Fig. 8 Cubic form is opened with rectangular gaps; atrium space
(Source: <http://www.archdaily.com/155229/static-quarry-ikimono-architects>)

8. 70F Architecture: Petting Farm, Almere, Netherland, 2005.

Half of the building is intended for animal accommodation and the rest is for other relevant uses. First floor includes double height space for animal accommodation and storage, while storage and offices are placed on the first floor. Building does not have conventional doors on the facade but has all necessary entrances. The compact form is the consequence of the openings mechanism, their visual treatment and position on the facade. Unconventional folding doors make different form experience when it is open or closed. When doors are closed, form implies to the limit of visual aesthetics (Fig. 9).



Fig. 9 Limit of visual aesthetics according to wood texture which applied
(Source: <http://www.e-architect.co.uk/holland/petting-farm-almere>)

5. DISCUSSION OF THE RESEARCH RESULTS

By reduction of particular spatial elements other parts of space are emphasized especially those which are probably not in focus. These elements actually represent the essence of spatial organization. One of the elements in fact is space itself as a “beneficial emptiness“. Natural and created environment, transparency and reflectivity also shape the space through play of light, shade and mass.

Deep understanding of minimal ideas can be seen through research results and their analysis. Form is only an expressed medium of function's concept and cannot be treated as an independent architectural aspect. Form and function could even be described as the same entity, because these seemingly two distinctive elements tend to accomplish the same goal.

Although general tendencies of minimalistic ideas aim to an irreducible minimum, some examples in practice uncover different nature of minimalistic thinking. By using a different perception of the same principle, classification of minimalist design achievements is given through variation of minimalistic idea types. This classification could be given by the level of the space reduction and the treatment of their certain parts.[22] According to this aspects next types of minimalist design are recognized:

1. Absolute minimalism - space minimization to the limit of visual aesthetics, examples: House in Leiria and Petting Farm.
2. Minimalism of colors according to form silhouette - reduced palette, monochromatic or soft colors and texture emphasize or increase effect of volume balance, most often cubic masses make harmony of asymmetry or balance relation of distinctive, different object parts, examples: Zacatitos 04 House, Nordrhein-Westfalen House and 4x4 House.
3. Minimalism of form according to applied texture - the form in its entirety is observed as one element. The reduced form of box gets texture which most often implies relation of fullness and emptiness, light and shadows, outer and inner space, example: Kunsthaus Bregenc, Static Quarry, House N, Zacatitos 04 House, and Petting Farm.
4. Functional minimalism - simplicity in service of concept idea produces unconventional floor plans with a lot of free connected spaces, which have fluid sense released without redundant boundaries, examples: House N and 4x4 House.

Certain forms, according to previous analysis, could be classified in two of these categories. The first reason of this dual classification is according to a point of view of these forms and the second is where the form is in some kind of transition between two form types. “Zacatitos 04 House” form tends to mono-volume and that can be seen in the shape of the floor plan. In some regions of form composing volumes can be noticed, thus this object belongs to second category. Perforated facade also occupies spectator’s mind which could be treated as three dimensional texture. This creates a new experience of form, therefore the building is classified also in the third category. According to their boxy, uniformly formed and random-placed rectangle gaps, “House N” belongs to the third category. This object is also classified to fourth category because the form is not finished by shaping the outer body. The task concept causes intertwining of spatial zones without clear boundaries, thus the inside space belongs to the outside and vice versa. “4x4 House“ is classified in fourth category because of functional simplicity of every floor plan, which is formed by one unique space, one room. This concept has arisen from task

requirements. Petting farm with their minimal imagery impression belongs to a group of absolutely minimalist proposals, therefore first category. Their woody texture finishing provides also possibility for classifying it into a third category.

6. CONCLUSIONS

Minimalistic approach has evolved through twentieth century of the history of architecture and became one of the most influential designing approaches nowadays. Minimalism has naturally evolved, although it did not have continuous flow of development. The reason: it is covered by sensibility of minimalistic affiliations. Minimalism does not belong to any aesthetic shaping style, direction or certain movement in architecture. Existing stylish movements of individuals accomplished some of their ideas in the sense of minimalism. The fact is that rarely any architect is declared as minimalist, in spite of obvious tendencies of incorporating these ideas in the architecture of twentieth and twenty first century. Therefore it may be more correct to conclude that minimalism is reflection of the way of thinking, life style, but also not an aesthetic style in architecture.

Architectural compositions which satisfy both aspects, spatial and time, could be treated as stylish-sustainable achievements. By analyzing theoretical postulates and relevant examples in practice, has been shown that minimalistic spirit has deeper foundation from the pure imposed style or a current trend. The proposals tend to correspond with time and space requirements and also need of pure expression without historical allusions. This approach provides achievements to the future requirements breaking the relations with limitative rules of the past. Because of this reasons, minimalism cannot be related to a certain time period, it already represents the timeless category. This phenomenon tends to adjust newly established circumstances to be in service of life, but not the other way around, life to be in service of artistic style direction.

Simple elegance of clean surfaces follows minimalist compositions, but judging by complexity of tasks, this effect isn't simply to achieve. If we try to spin the previously mentioned definition of minimalism in a way that word "simply" is used as a synonym of minimalism, it sounds like this:

- Minimalism is simple expression of comprehensive thought – original definition.
- Minimalism is simple expression of simple thought – spine definition.

The project's task of case study examples surely is not a simple thought because of their problem comprehensiveness. We can conclude that the minimalist proposal was actually reflection of the task's complexity. Therefore, here is the conclusion about the relation between two terms: the simplicity is only one of aspects of minimalism but not equal to or a synonym term. Will the minimalism be related to a certain time period is very hard to be told. Its performances and way of progress and spreading indicates its flexibility and possibility to adapt in many different contemporary compositions or in some of their parts. In favor of this, minimalistic form types are defined and refer to classification of case study examples. This phenomenon, which is founded in everyday life, becomes the way of thinking and lifestyle. The way of adapting to different styles is especially interesting, for example, in the building restoration or its implementation in the existing historical environment. It is compatible with Bruce Allsops proposal of architecture name changing to "experimental evidence" [23].

Minimalism in architecture brings new quality: in the first place it cleans space from unnecessary elements and acts very softly and neutral to context of its implementation without visually violating the environment. Simple adjustment to environment and a possibility of independent existence promote one of the most flexible expressions in architecture. This is not the case as in some historical styles which slowly disappeared. The reason is their inability of adaptation to the new tasks of contemporary life, its bad flexibility, so they were worn out and had to be completely changed with new styles and new principles of design.

REFERENCES

1. D. Vasilski, *Minimalizam kao civilizacijska paradigma na početku XXI veka*, Arhitektura i urbanizam, no. 22-23, 2008.
2. D. Vasilski, *Japanska kultura kao paradigma u formiranju minimalizma u arhitekturi*, Arhitektura i urbanizam, no. 30, 2010.
3. D. Vasilski (2015): *On Minimalism in Architecture: To Think Means to Build, On Architecture – Reworking the City Through New Architecture*, Conference Proceedings, Strand - Sustainable Urban Society Association, Belgrade, 2015. pp. 195-203
4. V. Stevanović, *Teorije minimalizma u arhitekturi: Post Scriptum*, Arhitektura i urbanizam, br. 35, 2012.
5. J. Pawson, *Pause for thought*, Madrid, El Croquis, 2005.
6. V. Stevanović, *Konstruktivni period teoretizacije minimalizma u arhitekturi*, Arhitektura i urbanizam, no. 34, 2012.
7. F. Bertoni, *Minimalist Architecture*, Birkhauser, Basel Boston Berlin, 2002.
8. J. Hill, *Immaterial architecture*, Routledge, New York, 2006.
9. B. Tschumi, *Arhitektura i disjunkcija*, AGM, Zagreb, 2004.
10. D. Vasilski, *Minimalism in Architecture: Materials as Instruments of Immaterial Reality Perception (Minimalizam u arhitekturi: materijali kao instrumenti percepcije nematerijalne realnosti)*, Arhitektura i urbanizam no. 37, 2013. (text in English and in Serbian)
11. V. Meyers, *Designing with Light*, London, Laurence King Publishing Ltd; 2006.
12. D. Vasilski, *O svetlosti u arhitekturi minimalizma - arhitektura bez svetlosti nije arhitektura*, Arhitektura i urbanizam, no. 28, 2010.
13. A. Cerver, *Architecture of minimalism*, New York: Hearst Books International, 1997.
14. D. Vasiljević Tomić, *Kultura boje u gradu*, Arhitektura i urbanizam 26, pp. 12-22, 2009.
15. D. Vasilski, *Uticaj različitih motivacija na nastanak i razvoj minimalizma u arhitekturi*, Nasleđe, Kragujevac, 2010, vol. 7, no. 16, pp. 227-251
16. D. Vasilski, *Minimalism in Architecture: The Juxtaposition between Architecture and Sculpture*, Novi Sad: MATICA SRPSKA Department of Visual Arts, no 42/2014.
17. H. Obendorf, *Minimalism, Designing Simplicity*, University of Hamburg, Germany, 2009.
18. P. Allison, *Beyond the minimal*, London: AA Publications, 1998.
19. S. Fujimoto, *Garden, in Primitive Future*, INAX Publishing, Tokyo, 2008.
20. J. Pawson, *Minimum*, London: Phaidon Press, 1996.
21. S. Schleifer, *Minimalist Houses*, Keln, Taschen, 2006.
22. D. Vasilski, *Minimalism in Architecture: Architecture as a Language of its Identity (Minimalizam u arhitekturi - kako jezik arhitekture predstavlja njen identitet)*, Arhitektura i urbanizam, no. 34, 2012. (text in English and in Serbian)
23. B. Allsopp, *A modern Theory of Architecture*, Routeladge and Kegan Paul, 1977.

MINIMALIZAM U ARHITEKTURI KAO JEDAN OD NAJZASTUPLJENIJH ESTETSKO-FUNKCIONALNIH OBRAZACA DANAŠNJICE

Minimalizam u arhitekturi i težnja ka svedenim formama postaju sve učestalije pojave u praksi. Istraživanje je usmereno ka razotkrivanju odnosa ovakve pojave sa stvarnošću, zbog čega su formirane polazne hipoteze: minimalizam u arhitekturi je isto što i jednostavna arhitektura i da je minimalizam stilski pravac u arhitekturi. Kroz sagledavanje karakteristika i značaja minimalizma u savremenoj arhitekturi i analize relevantnih primera iz prakse, kao studije slučaja arhitektonskih objekata koji su koncipirani na idejama minimalizma, izvršena je sinteza dobijenih rezultata i izvođenje zaključaka o prethodno postavljenim pretpostavkama u skladu sa rezultatima istraživanja. Zaključak je da minimalizam ukorenjen u svakodnevicu postaje način razmišljanja i stil života.

Ključne reči: *minimalizam, arhitektura, umetnost, estetika, funkcija, jednostavnost*