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GLASS ROOM – VISION OR DREAMS

SZKLANY POKÓJ – WIZJA CZY MARZENIA

Abstract

This article addresses the issue of shaping architectural forms associated with a specific architectural style, representing universal, timeless values, using selected modernist architecture as an example. The research was based on observation, in situ analysis, and emotional reception (direct contact and perceptual response) of Ludwig Mies van der Rohe symbol of modernist architecture, located in the northern part of Brno, Czech Republic. The article attempts to answer the question: In a world of architectural diversity, does novelty still seem to be the most important issue? It also encourages discussion on contemporary perceptions of the principles of durability, utility, and beauty, as well as current design trends.

Keywords: architecture, composition, landscape context, art

Streszczenie

Artykuł porusza problematykę kształtowania form architektonicznych przypisywanych do konkretnego stylu, stanowiących uniwersalne, ponadczasowe wartości na przykładzie wybranej architektury modernistycznej. Badania oparto na obserwacji, analizie *in situ*, a także emocjonalnym odbiorze (bezpośredni kontakt i reakcja percepcyjna) symbolu architektury modernistycznej autorstwa Ludwiga Miesa van der Rohe, znajdującego się w północnej części Brna w Czechach. Podjęto próbę znalezienia odpowiedzi na pytanie: czy w świecie różnorodności architektury nowość wydaje się pozostawać wciąż kwestią najważniejszą? Zachęcono również do dyskusji na temat współczesnego postrzegania zasad trwałości, użyteczności i piękna oraz obecnie podejmowanych kierunków projektowania.

Słowa kluczowe: architektura, kompozycja, kontekst krajobrazowy, sztuka

1. INTRODUCTION

Well-designed architecture characterised by beautiful form is one of the conditions for a comfortable existence. Architecture that has been carefully considered in terms of user expectations, together with the location and condition of its surroundings should form one of the pieces of a jigsaw puzzle that fit together. Greenery also plays an important role in this puzzle, because “an individual who loses contact with nature pays for this break with illness and decline. Breaking this contact weakens their body and spiritual sensitivity, corrupted by the illusory joys of city life”¹. The maxim invoked by Le Corbusier is one of the main principles in the design of living spaces. In the context of greenery, which creates multifaceted protective barriers and additionally provides images outside the windows that change with the seasons, it is enough

¹ Le Corbusier, *Karta ateńska*, Fundacja Centrum Architektury, Warszawa 2017, p. 96.

to simply be there. The simplicity of the forms blends into the scenery so that their presence does not obscure its beauty but only complements it, acting as a tasteful addition. Ludwig Mies van der Rohe's project in Brno – the Tugendhat Villa – is an example of a building that combines all the features conducive to a good life for its residents and the non-aggressive coexistence of architecture and greenery. This modernist building, which does not feature any historical details but instead uses door handles, grips, fastenings, and other elements, designed specifically for its character, partly confirms Otto Wagner's words that beauty depends directly on the usability of a given form or object. It is not only because of its location and logically planned function that we agree with this theory. The simplicity and clarity of the composition, the coherent and well-thought-out form, the lightness and accessibility of daylight streaming into the interior, creating additional effects, all combine to form a perfect whole. Treated until the 1990s as contemporary modernist buildings, now appreciated and legally protected by being entered in the register of monuments, "these selected works of 20th-century architecture are treated in the same way as monuments from earlier periods and are subject to conservation work rather than standard building renovations"². Selected ones, including the Tugendhat Villa, are protected in terms of matching technology and materials to the individual characteristics of the monument, and appropriate conservation studies indicate the direction of individual solutions. It would seem that this building, which is under conservation protection, is the result of yesterday's finalisation of an architectural design that reflects a conscious, mature, and bold approach to the design process. A balanced composition of harmoniously proportioned forms, ascetic in expression, rich in the designer's thoughtful concepts, with its lightness, like a brooch, adds extra charm to the space, delicately crowning the gently sloping hillside with the striped components of the puzzle. "Beauty always appears to me in images, in clearly defined fragments of reality, in the form of an object or still life, or as a compact scene, composed without a trace of effort or artificiality. Everything is as it should be, everything is in its place."³ The villa, built on a steel frame structure, full of timeless concepts, located in a perfectly chosen setting, is a testament to the existence of ageless architecture, architecture that carries the history and potential of the future within it, architecture that is unobtrusive and elegant, architecture that is still avant-garde and awe-inspiring, and finally: architecture that is spacious, comfortable and blended into the greenery – architecture that gives more. It is like one of the proverbial "glass houses"⁴, which had many advantages: they were simple and quick to build, cheap, warm, clean, healthy, and beautiful. The Tugendhat Villa is like a work of art, and

great works of art are complex, but we also value them for their 'simplicity', meaning that the richness of meaning and form is captured in an overall structure that clearly defines the place and role of each detail in the whole. Organising the necessary structure in the simplest possible way is what we call its discipline⁵.

The discussion focuses on defining how to create architecture that is still relevant and disciplined in terms of composition, and presenting its value in an era of pursuing novelty, commercialism, and a constant desire for change.

² M. Korpała, *Ochrona substancji czy formy w zabytkach epoki modernizmu*, "Wiadomości Konserwatorskie" 2017, no. 49, p. 54, https://repozytorium.biblos.pk.edu.pl/reδο/resources/28507/file/suw-Files/KorpałaM_OchronaSubstancji.pdf (access: 5.08.2025).

³ P. Zumthor, *Myślenie architekturą*, Karakter, Kraków 2010, p. 76.

⁴ S. Żeromski, *Przedwiośnie*, Greg, Kraków 2024.

⁵ R. Arnheim, *Sztuka i percepcja wzrokowa. Psychologia twórczego oka*, Oficyna, Łódź 2022, p. 72.

2. SEARCHING FOR THE VALUE OF ARCHITECTURE – STATE OF RESEARCH

One of the principles implemented by modernists concerned green areas: “many factors contribute to good housing. One should seek beautiful views, the healthiest air (taking into account winds and fog), slopes best exposed to sunlight, and finally, utilise green spaces, create them if they are lacking, or restore them if they have been destroyed.”⁶ The conditions described above are ideal arguments for choosing a place to live, which still translate into the value of the land in question, unfortunately resulting in a division into groups of customers who can take advantage of such offers. Nevertheless, the desire to be surrounded by greenery is one of the basic existential needs, which was particularly emphasised during the Covid-19 pandemic, when there was a significant increase in demand for allotments and building plots outside cities, and these needs were felt most acutely by residents without gardens, balconies or loggias. The term “biophilia”, referring to the innate human need for contact with nature, was popularised by E.O. Wilson (1984)⁷. S.R. Kellert, S.R. Heerwagen, and J.M. Martin developed the concept of biophilic design in architecture, pointing out that buildings should support mental and physical health through integration with the natural environment⁸. Organic architecture focuses on combining the harmony between the natural beauty of the landscape and the building. It also encompasses aspects such as environmentally friendly building fittings and the integration with the surrounding environment through the use of natural, environmentally friendly materials⁹. These aspects are certainly beneficial to the natural environment when making design decisions, as well as to the user. It is well known that “buildings erected along transport routes and around street intersections are unsuitable for residential purposes: noise, dust, harmful exhaust fumes, and the traditional layout of houses along street edges ensures that only a very small proportion of flats receive sunlight”¹⁰. The positive impact of greenery on human existence is also discussed by M. Worłowska and M. Marko-Worłowska in their study entitled: *Ecological Problems in Green Urban Architecture*. The authors claim that: “Architecture and ecology have one fundamental feature in common – they both are arts of shaping space and relationships between people and their environment”¹¹. The freely shaped window openings, which provide an adequate amount of daylight, allow for easy integration with nature. It is not only the sculpture that is perceived through the prism of light and shadow. The architectural form, both inside and outside, is constructed with light that provokes a play of shadows on the façades, interior walls, and floor. As K. Warzocha writes: “For many Poles, especially young people, owning their own flat is a great blessing, but owning a well-lit flat is a real luxury today”¹². Unfortunately, this is the result

⁶ Le Corbusier, *Karta ateńska*, *op. cit.*, p. 114.

⁷ E.O. Wilson, *Biophilia*, Harvard University Press, Cambridge 1984.

⁸ S.R. Kellert, J.H. Heerwagen, J.M. Mador, *Biophilic design*, John Wiley & Sons, Hoboken 2008.

⁹ K. Paprzyca, *Natura – Architektura – Człowiek*, “Środowisko Mieszkaniowe” 2018, no. 22, pp. 140–146, <https://cris.pk.edu.pl/info/article/CUTafe601eb48c841b4ae2227249f00486d/> (access: 6.08.2025).

¹⁰ Le Corbusier, *Karta ateńska*, *op. cit.*, pp. 102–103.

¹¹ M. Worłowska, M. Marko-Worłowska, *Problemy ekologiczne w zielonej architekturze miasta*, “Proceedings of ECOpole” 2011, no. 1, pp. 343–347, <http://yadda.icm.edu.pl/baztech/element/bwmeta1.element.baztech-74d45945-fafc-4b06-9d61-61e081beadaf/c/Worłowska.pdf> (access: 6.08.2025).

¹² K. Warzocha, *Naturalne światło w budownictwie mieszkaniowym początku XXI wieku. Standard czy luksus?*, “Środowisko Mieszkaniowe” 2017, no. 18, p. 137, <https://yadda.icm.edu.pl/baztech/element/bwmeta1.element.baztech-c7bbe55d-d82a-4348-bdd6-0f79ee79fecb/c/Warzocha.pdf> (access: 6.08.2025).

of common methods used to maximise the usable area of a building. The dense residential development appearing in cities provides people with their own homes, but does not ensure privacy or freedom when buildings are constructed window to window. “Areas with favourable conditions are mostly occupied by luxury flats”¹³. Thus, being outdoors is synonymous with the possibility of using a micro-garden on the ground floor of buildings, often located right next to a road, or a small area of bushes and trees located on the roof of an underground car park. In such situations, the size of the windows is irrelevant, as they are usually covered to provide a little privacy inside the flat. The walls of neighbouring buildings block out the greenery, leaving the residents with only a balcony or loggia to compensate for their own “green space”. Flats are very often designed as narrow and deep rooms, often with dark kitchens, dining rooms, and awkwardly shaped and poorly lit rooms. Following the words of T. Dyckhoff: “architecture has become a luxury product today”¹⁴ in terms of comfort and price. The form of the buildings themselves is essentially simple, usually monochromatic with modest additions of subdued colours, such as grey or black. The minimalism of the exterior, often referred to as “modernism”, is sometimes mistakenly understood as a return to the trends of the first half of the 20th century. Unfortunately, this is often done without any awareness of the original intentions of the modernists and the direction in which the designed architecture was supposed to go. And yet: “we carry within us images of architecture that has left its mark on us. We can bring these images to life in our minds and question them. (...) Our ‘old’ images can only help us find new ones”¹⁵. All you need to do is read the message from the past, notice the craftsmanship and effects, and appreciate the resources that often remain timeless. As R. Hajdamowicz writes: “we must remember that the quality of the living environment and standards are also created through creative heritage, the architecture of previous periods, which can become the starting point for today’s architectural projects”¹⁶. The words of Ch. Alexander quoted by J. Łukowicz, also seem valuable: “The pattern-based design method, by providing tools in the form of solutions verified in practice, frees the designer from the obligation to ‘reinvent the wheel’ and allows them to focus on the specifics of the project, aiming to achieve the expected goal by creating the desired model as a composition of well-defined elements.”¹⁷. It focuses mainly on urban planning, but can be successfully applied to residential buildings. An example of a similar line of thinking is presented by J. Pallasmaa, who writes in his monograph: “Every experience evokes acts of recollection, memorisation and comparison. (...) In important architectural experiences, space, matter and time merge into one dimension, into the basic substance of being that permeates our consciousness”¹⁸. R. Arnheim also confirms the value of drawing on the experience of designers from previous years: “A new look is neither a distortion nor a betrayal; it merely interprets old truths

¹³ Le Corbusier, *Karta ateńska*, *op. cit.*, p. 100.

¹⁴ T. Dyckhoff, *Epoka spektaklu. Perypetie architektury i miasta XXI wieku*, charakter, Kraków 2018, p. 376.

¹⁵ P. Zumthor, *op. cit.*, p. 67.

¹⁶ R. Hajdamowicz, *Zmartwychwstała modernistyczna „mieszkaniówka” wizytówką dzisiejszego miasta*, “Architecturae et Artibus” 2009, no. 1, p. 33, <https://bibliotekanauki.pl/articles/398343.pdf> (access: 11.08.2025).

¹⁷ J. Łukowicz, *Wykorzystanie wzorców projektowych Christopfera Alexandra na przykładzie projektu miejscowego planu zagospodarowania przestrzennego dla dzielnic: Śródmieście-Centrum, Lasowice, Osada Jana w Tarnowskich Górach*, postgraduate thesis, Politechnika Gdańska, Wydział Architektury, Gdańsk 2008, p. 3, <https://open.icm.edu.pl/items/fae219e9-9deb-4018-95a3-65c2e-81ae25f> (access: 11.08.2025).

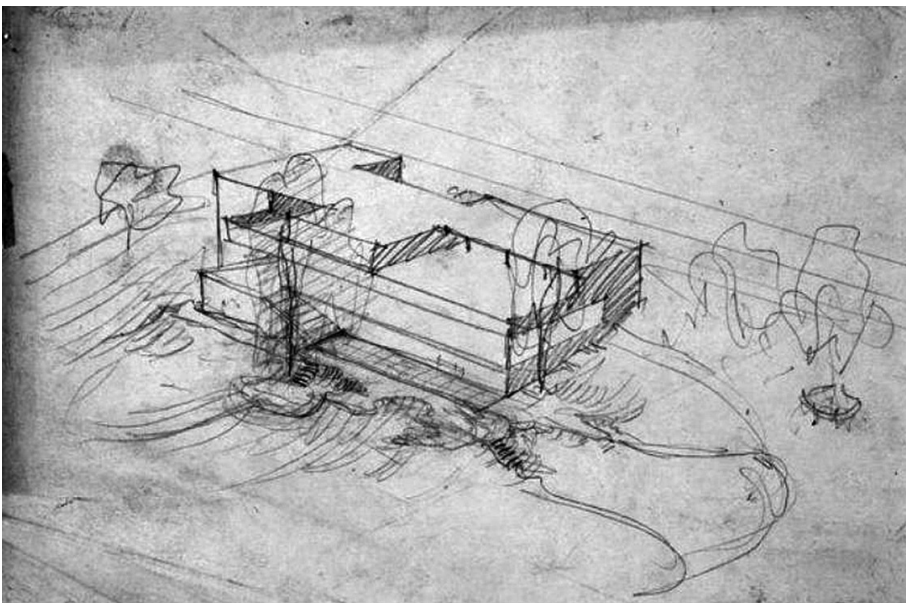
¹⁸ J. Pallasmaa, *Oczy skóry – architektura i zmysły*, Instytut Architektury, Kraków 2012, p. 83.

in a dazzling and movingly fresh way. The unity of the artistic concept leads to simplicity, which, far from denying complexity, reveals its advantages when it does not seek escape in abstemious poverty, but masters the multiplicity of human experiences.”¹⁹. It is worth asking ourselves what remains the overriding value for humans and the space in which we live, and whether what is new is necessarily the best? This is a fundamental question, because, following the words of SE. Rasmussen, we must recognise that “architecture is a very special functional art: it encloses space so that we can live in it, and creates a framework for our lives”²⁰.

3. FORM, COMPOSITION, IDEA

...an architectural work should survive into the distant future. An architect creates the setting for a long, slowly unfolding action, so it must be flexible enough to adapt to unforeseen improvisations. At the design stage, the building should, as far as possible, be ahead of its time so that it fits in with the period in which it will exist²¹.

An example of this type of architecture is the Tugendhat Villa in Brno. A symbol of modernist architecture, this luxurious detached house was built between 1929 and 1930 for the industrialist Fritz Tugendhat and his wife Greta (Ill. 1).



Ill. 1. Tugendhat Villa, design by Ludwig Mies van der Rohe – the rectangular arrangement of the structures creates a spacious, light composition that fits into the spatial context, source: Pinterest, <https://i.pinimg.com/736x/49/44/70/49447026fa78504628d4aa3027848619.jpg> (access: 24.08.2025)

¹⁹ R. Arnheim, *op. cit.*, p. 73.

²⁰ S.E. Rasmussen, *Odczuwanie architektury*, Karakter, Kraków 2015, p. 10.

²¹ *Ibidem*, p. 12.

The building is located on a 2,000-square-metre plot on a picturesque hill overlooking the panorama of Brno. The architect took advantage of the topography of the terrain and designed a single-storey building on the street side, where the main entrance to the building is located, with three storeys on the garden side. From the front, the building appears to be a single-storey, minimalist, even ascetic structure, with a gap signalling an intrigue that is fulfilled once you cross the threshold of the villa. This situation can be successfully illustrated by quoting a fragment of a poem by Julian Przyboś, whose work was part of Władysław Strzemiński's abstract graphic games.

*...tam, księżyc z zewnątrz przez okno się zwiesił
I, cichvo o tynk stuknąwszy, odpadł cieniem.
Gwiazdy spłynęły po szybie. Tam – poza –
Przejdę, po śladach podłogi, spojrzeniem.*

*Pokój, pełny światła, w sobie mnie nie zmieści,
Jak on we mnie, w ciele czuję się dwukrotnie²²*

[...there, the moon hung outside the window
And, tapping the plaster, fell away as a shadow.
The stars flowed down the window pane. There – outside –
I will walk, following the traces on the floor, with my gaze.

The room, full of light, cannot contain me,
Just as it cannot contain me, I feel twice as much in my body]

A well-thought-out, simple architectural composition perfectly conceals a spacious living area (Ill. 2). Natural, patterned materials such as onyx and mahogany provide a soothing effect in the austere interior, ensuring comfortable living conditions surrounded by carefully planned greenery, unpretentiously complementing the urban design.



Ill. 2. Tugendhat Villa seen from the street; characteristic simple forms, source: Villa Tugendhat [in:] 20th-Century Architecture, <https://architecture-history.org/architects/architects/MIES%20VAN%20DER%20ROHE/pic/VT103.JPG> (access: 24.08.2025)

²² J. Przyboś, *Z ponad*, Zakłady Drukarskie i Wydawnicze Karola Prochaski, Cieszyn 1930, p. 19.

Visible from the street, the terrace invites us to admire the cascading fragments of the city, like an outstretched hand encouraging us to stop and look deeper into the creations of nature and human beings. It opens up the possibility of spending time outdoors, offering a large area complemented by small architectural elements and greenery, as well as access to a lower level, from which one can directly exit into the park. The structure of the building is reminiscent of a jigsaw puzzle, of playing with matching shapes, geometry.

Geometry in aesthetics is always associated with rationalisation, ordering of form and an attempt to describe it as simply and clearly as possible. Therefore, the creativity of functionalism *avant-garde*, based on geometric abstraction, can be described as a search for the correct formula of artistic composition, which will guarantee the correct ratio of mass and space in which it is located²³.

As an example of *avant-garde* architecture of the interwar period, the building was ahead of its time, confirming that it is possible to create forms, the beauty of which will not fade despite changing trends and even technology (Ill. 3). The strength of the composition lies in the harmonious arrangement of individual zones and bold compositional decisions, made possible by the use of a steel-frame structure that allows for freedom in shaping the space.

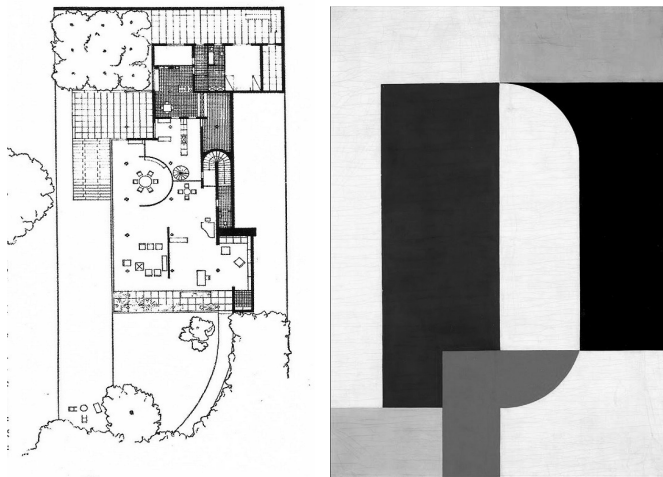


Ill. 3. Fragments of the Tugendhat Villa; a) view of the roof leading to the terrace and garage; b) the soft form of the staircase integrated into the arrangement of rectangular blocks; c) hidden entrance to the building ensuring privacy. Photos by K. Stuchocka

In the context of rectangular forms, the circular elements, such as staircases and an arched wall separating the dining area, add finesse and complement the whole. The horizontal line of the roof, supported by delicate pillars, protects the entrance area from the sun and rain, while providing a strong frame for the Old Town of Brno and the areas below. It would seem that there is little to surprise in this structure, as everything is visible, yet the idea of placing the entrance door between the wall leading to the entrance and the glass staircase is an interesting way of introducing and protecting it against excessive visual interference from passers-by. The frosted glass used in the stairwell lends intimacy to the space, allowing sunlight to gently filter through and illuminate the room. The absence of windows on the main walls of the front façade, replaced by vertical strips of windows located in the less obvious places, also conceals the secrets of the house. In contrast, on the garden side, the glass walls are only a physical barrier, seemingly immaterial, which allows users to see outside. The main, representative part of the building, the so-called

²³ Y. Ivashko et al., *Modern use of the world heritage site – villa Tugendhat in Brno and its significance for modern architecture*, “International Journal of Conservation Science” 2025, vol. 16, special iss., p. 625, https://ijcs.ro/public/IJCS-25-si_19_Serafin.pdf (access: 12.08.2025).

“glass room,”²⁴ does not compromise privacy. Set back from the front street, it ensures quiet, and the green surroundings create a safe boundary with the neighbours. This is also facilitated by the size of the garden and park, which obscures details that could make people inside or on the terrace feel unsafe. Every part of the building has been carefully thought out. The combination of these parts into a whole means that the whole harmonises in relationships that are functionally and logically complementary. They are perfectly organised, which was appreciated by B. Spinoza: “if things are arranged in such a way that when they are presented to us through the senses, we can easily imagine them and then easily remember them, then we call them well-ordered; otherwise, we call them poorly ordered, or disordered”²⁵. Functional necessity combined with the architect’s excellent sense of composition and order creates a perfect image, a complete form, and “form is the foundation; a thorough understanding of it determines the concept of the meaning of art”²⁶. The concept of form can be considered in two ways – as layout and as shape. In ancient times, the former was associated with harmony, symmetry, and compositional order. The Pythagoreans maintained that no art can be created without proportion, and that proportion lies in numbers. “All art is created by numbers (...). There is a certain proportion in sculpture, and similarly in painting. Thanks to this proportion, they achieve complete correctness of the work. Generally speaking, all art is a system of perceptions, and a system is a number, so it is right to say: ‘thanks to numbers, everything looks beautiful’”²⁷. The structure of the Tugendhat Villa can be compared to a fully enclosed composition, simple, clean, and balanced. Considering the building’s floor plans, we can see a monochromatic, artistic graphic design which, if colour were added to it, could be associated with the works of Henryk Stażewski or Władysław Strzemiński (Ill. 4).



Ill. 4. Comparison of architectural composition with artistic composition; a) floor plan of the main storey of the building, source: own elaboration; b) painting by Henryk Stażewski entitled *Composition*, source: Szum, <https://magazynszum.pl/wp-content/uploads/2017/07/19-1.jpg> (access: 20.08.2025).

²⁴ *The Glass Room* – a feature film directed by Petra Bučková and Julius Ševčík (screenplay by Andrew Shaw), a Czech-Slovak production based on the true story of the Tugendhat couple.

²⁵ B. Spinoza, *Etyka*, Państwowe Wydawnictwo Naukowe, Warszawa 1954, p. 59.

²⁶ A. Osęka, *Spojrzenie na sztukę*, Wiedza Powszechna, Warszawa 1987, p. 8.

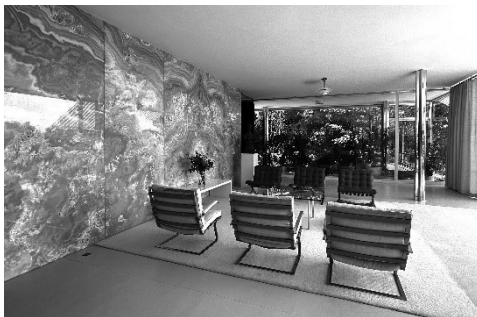
²⁷ W. Tatarkiewicz, *Historia estetyki*, vol. 1, *Estetyka starożytna*, Zakład Narodowy im. Ossolińskich, Wrocław 1960, pp. 103–105.

The painting *Composition* from 1930 is an abstract open composition by Henryk Stażewski. Seemingly asymmetrical, it is based on an arrangement of simple shapes in various colours. Referring to the drawing of the villa's floor plan, upon closer analysis, we find a similar method of creation. The vertical arrangement of rectangular components with a break in the form of circular segments with a marked axis of symmetry, which does not divide the images into two identical halves, but only marks an important zone in the horizontal record. In Henryk Stażewski's painting, it indicates the possibility of balancing the elements on the left and right despite the difference in colour. In terms of architectural design, it fragmentarily, but decisively defines the central axis, distinguishing functional zones in the interior. It also plays a key role in the 280 m² living room. This small partition wall is the main decorative element, providing an excuse for the play of sunlight coming through the large windows. Partially translucent, it changes its appearance depending on the intensity of the sunlight, revealing a multitude of shades to the viewer. Analysing the presented floor plan by referring to the image, it is clear that the line of the partition wall is of fundamental compositional importance (Ill. 5). It reinforces and stabilises the entire drawing and organises the space.



Ill. 5. A fragment of the living room of the Tugendhat Villa with the main view of the onyx partition wall, photo by K. Stuchocka

The onyx wall complements the interior of the living room with its delicate, warm colour, compensating for the austerity of the materials. This element also perfectly organises the space of the interior, separating areas with different purposes. (Ill. 6).



Ill. 6. Interior shots of the Tugendhat Villa living room; a) lounge area separated by an onyx wall; b) visible division into zones in the villa's living room; photos by K. Stuchocka

It acts as a partition, guiding the eye to what is desirable – namely a multi-layered image composed of lush greenery and a panorama of the city visible in the distance.

Referring to flat compositions, we can trace the transition from architectural drawings to abstract geometric compositions reminiscent of the work of Henryk Stażewski (Ill. 7a, b, c, d). When attempting to compare technical drawings with works of art, we find common elements that form both compositions.



Ill. 7. Comparison of the architectural floor plan composition with an abstract artistic composition inspired by Henryk Stażewski's painting entitled *Composition*; a) basic floor plan of the villa; b) basic floor plan of the villa without interior design; c) composition taking into account colour functional zones; d) composition taking into account colour functional zones. Own elaboration

The vertical arrangement and the same direction, as well as the filling of the fields with colours (Ill. 7c, d), reinforce the impression of a common denominator for all – which is the arrangement of rectangles in parallel and perpendicular relations. Apart from the similarity in colour, the basic feature of consistency is the idea of number, geometry, and proportion that inspired both artists. Mies van der Rohe – a minimalist and brutalist, and Henryk Stażewski – a representative of constructivism, co-creator of the geometric abstraction movement of the 1960s and 1970s. The painter based his work on the arrangements of simple shapes and, influenced by the architectural compositions of Władysław Strzemiński, he expressed himself “in paintings analysing the relationship between figure and background, in which letters were inscribed into the rhythm of the geometric structure of the composition”²⁸. He often crossed the boundaries of the image with spatial elements protruding from the canvas, demonstrating his passion for geometry, construction, and space. He understood the principles governing spatial arrangements, where light and shadow are additional factors that contribute to the whole and have a strong effect on the viewer. In the works of Ludwig Mies van der Rohe, who was influenced, among others, by Russian constructivists and the Dutch De Stijl group, there is also a visible attachment to balanced proportions, combinations of planes with lines, and restraint in excessive decorative details. Analysing the architectural plan of the villa and the painting, which bear a resemblance to each other, it can be concluded that both works are complete, perfect, and balanced compositions, from which nothing can be taken away or added without disturbing their harmony. The materialised form of the plan is also an extraordinary work of art. The outer shell, defined by lines that enclose the flat composition, and the consistently shaped interior, despite the passage of time, create an architecture of exceptional and timeless dimensions. An architecture that embodies *firmitas*, *utilitas* and *venustas*, in which the relationship between art and technical science plays a fundamental role.

4. COMPOSITION IN GREEN SURROUNDINGS

“An architect also has something in common with a gardener who designs a park. It is clear that the gardener’s success depends on the right choice of plants. Even the most beautiful park design will be useless if the selected plants do not find the right environment for themselves in it, if they cannot thrive there”²⁹. S.E. Rasmussen’s words can be attributed to the Tugendhat Villa project and the green spaces in which it is surrounded. The architect-gardener comprehensively incorporated the idea of living in the embrace of a soothing park-garden. Aware of the ergonomics of space use, but also of the need to commune with beautiful forms, he knew that regardless of climatic conditions and the quality of the natural environment, being surrounded by greenery brings a number of benefits to humans, both mental and physical.

According to environmental psychologists, our connection with nature is encoded in our genes, and contact with it connects us to the past of humankind. According to this theory, our reaction to plants is innate and spontaneous. Our fondness for nature is the result of evolution:

²⁸ I. Kossowska, *Henryk Stażewski* [in:] Culture, 2001, <https://culture.pl/pl/tworca/henryk-stazewski> (access: 11.08.2025).

²⁹ S.E. Rasmussen, *op. cit.*, p. 12.

vegetation is the original environment from which we originate, and that is why we react positively to its presence³⁰.

It is also important that parks and gardens encourage people to meet others, which can counteract loneliness. Urban greenery significantly improves the quality of life in communities – residents feel safer and more satisfied with where they live. Nowadays, greenery is part of architecture not only for aesthetic and health reasons, but also for economic reasons due to excessive energy consumption³¹, as discussed in studies by J. Jachimiuk, M. Mokrzecka, and others.

Importantly, the use of greenery as a compositional element with a positive effect and impact on people and the environment is not a new idea. As early as the 6th century BC, green gardens were constructed on rooftops in Mesopotamia. “An example of this can be found in the hanging gardens of Queen Semiramis in Babylon, built on the orders of King Nebuchadnezzar II (604–562 BC) for his wife Amytis, to satisfy her need to commune with the greenery of her native country, Media”³². The symbiotic existence of greenery and architecture has been observed for years, with only the nature of this relationship changing. “Designers’ unlimited imagination supported by the plant adaptability and advanced technologies results in the formation of ever more surprising objects, such as ‘pot – house’ or ‘forest – skyscraper’”³³. In the context of these advances, however, the question arises about the balance between implementing ideas in the field of ecological architecture and preserving formal and aesthetic values. It is particularly important to consider whether the pursuit of increasing urban greenery and introducing biodiversity – as elements that improve the functioning of urban ecosystems – does not lead to the neglect of the aesthetic and artistic aspects of architecture. This raises another question: Can contemporary architectural structures still be considered works of architectural art, or are they increasingly becoming merely experimental forms, architectural jokes or candidates for competitions for the most absurd architectural “follies”?

Considering the Tugendhat Villa, it is easy to see that comfortable living conditions have been enhanced by the adaptation of a large area offering relaxation, shelter, and respite in the open air among flowers, trees, and shrubs. In most urban spaces, such luxury is not always possible, but this does not mean that it is permissible to densify residential environments at the expense of parks, squares, and urban gardens, and to use greenery solely in the context

³⁰ M.J. Latkowska, „Zielona” natura człowieka [in:] B.J. Gawryszewska, B. Rothimel (eds), *Ogród za oknem. W zgodzie z naturą*, Wydawnictwo Sztuka ogrodu Sztuka ogrodu krajo-brazu, Warszawa 2011, pp. 95–96, https://www.researchgate.net/profile/Beata-Gawryszewska/publication/343602111_OGROD_ZA_OKNEM_w_zgodzie_z_natura_GARDEN_BEHIND_THE_WINDOW_in_harmony_with_nature/links/5f33ca89a6fdcccc43c24a32/OGROD-ZA-OKNEM-w-zgodzie-z-natura-GARDEN-BEHIND-THE-WINDOW-in-harmony-with-nature.pdf#page=94 (access: 4.08.2025).

³¹ J. Juchimiuk, *Certyfikacja ekologiczna BREEAM w warunkach polskich – trzy budynki biurowe Trinity Park III, Crown Square, Katowice Business Point*, “Przegląd Budowlany” 2011, no. 5, p. 88; Mokrzecka M., *Międzynarodowe systemy certyfikacji LEED, BREEAM i DGNB. Wstępna analiza porównawcza poparta studium przypadku*, “Czasopismo Inżynierii Łądowej, Środowiska i Architektury” 2015, no. 2, p. 320.

³² M. Szczepańska, *Zielony dach – niecodzienne miejsce wypoczynku i rekreacji*, “Studia Periegetica” 2010, no. 4, p. 161, <https://journals.wsb.poznan.pl/index.php/sp/article/view/266/284> (access: 6.08.2025).

³³ M. Rzeszotarska-Pałka, *Gra w zielone – zieleń w architekturze*, “Przestrzeń i Forma” 2015, no. 2, p. 189, <https://bibliotekanauki.pl/articles/369769> (access: 21.08.2025).

of creating biotic walls and roofs. This is essentially in line with the principles of energy-efficient architecture, but it does not take into account greenery as a factor of personal influence. Greenery often remains out of reach for residents.

user ↔ need for greenery ↔ direct influence factor

A direct impact factor should be understood as a factor that benefits the individual recipient in a singular way, which is associated with the fact of interacting with greenery within the scope of individual physical or visual contact.

direct influence factor ↔ individual contact zone

Designing with a view to satisfying the individual need for physical contact with greenery can definitely gain popularity among future users of a given space. A good example is the concept of incorporating green elements into the architectural design in a way that treats all components of the composition equally. A significant feature of the villa design was precisely this nod to nature, resulting from design attentiveness focused on the benefits of contact with greenery (Ill. 8).



Ill. 8. The Tugendhat Villa seen from the garden; a) the west facade covered with climbing plants in the context of the garden's greenery; photo by A. Grabowska; b) the dominance of greenery, which also creates an interesting composition; photo by K. Słuchocka

Looking at Mies van der Rohe's project in Brno from the garden side, it is easy to see that the green buffer zone in the horizontal and vertical planes has a positive effect in terms of aesthetics, ecology, and health, and also softens the contrast between the building and the park-and-garden complex. The white façade is neutralised by the climbing greenery, giving the impression that the building is floating above the ground and creates a green screen for people spending time on the lower terrace. This is a simple way to provide a friendly, private area accessible from the outside. The internal zone of individual contact is mainly represented by the winter garden located on the level of the living room and accessible from it (physical contact). It is also visible from the lounge area of the living room thanks to a glass wall that creates a kind of frame for the view of the greenery (visual contact) (Ill. 9).



Ill. 9. The interior of the Tugendhat villa; a) winter garden; b) view of the greenery from the villa's living room. Photos by K. Słuchocka

A winter garden with sunlight coming in from two sides, is a space for peaceful relaxation with a book in hand or simply for reflection between household chores. It also guarantees that greenery will grow and bloom all year round, and provides an opportunity to pursue gardening hobbies. Standing in the villa's living room, we are treated to a powerful dose of impressions from the image formed by the window openings, presenting an almost impressionistic vision of a paradise garden. Mies van der Rohe's design at the time was not based on the principles of sustainable architecture or on a desire or obligation to improve the urban microclimate. It was proof of the architect's design awareness and a nod to human needs. The green spaces were intended to be thoughtful elements of the overall composition. Greenery did not serve to conceal unsuccessful parts of the design, nor did it fill functional gaps; it was the essence of the concept, the main narrative of the creative process. A narrative that is priceless and endless, a narrative that leads through time, and "time is a great window to the world, and windows are small streams of time that flow into and out of the world. A person standing in front of a window stands in front of time."³⁴

5. CONCLUSIONS

"The plan emerges from the centre to the surface: the exterior results from the interior. The architectural elements are light and shadow, wall and space. Order is a hierarchy of goals, a classification of intentions"³⁵. Le Corbusier's words are an eloquent summary, encapsulating the essence of Mies van der Rohe's design for the Tugendhat Villa in Brno. The architect's vision, characterised by boundless imagination and sensitivity to beauty found not in splendour but in the simplicity of form, sought answers in the sincerity of materials and appreciating the positive impact of greenery on people and the synergy between architecture and greenery, which resulted in a design for a building set in a park and garden, which continues to inspire admiration to this day. The materialised idea, based on basic compositional principles, still sounds novel despite the passage of time. Its uniqueness is not the result of a search for applause

³⁴ S. Symotiuk, *Filozofia i genius loci*, Instytut Kultury, Warszawa 1997, p. 56.

³⁵ Le Corbusier, *W stronę architektury*, Fundacja Centrum Architektury, Warszawa 2012, p. 207.

or the need to create a flashy, crazy work. It is humility towards the natural environment that provided the spatial context, and awareness of the intentions and value of the relationship between architecture and art. Openness and the conviction that the way of composing a work of art and a work of architecture, based on the mutual relationship between the two, can result in a satisfactory final outcome, is a timeless direction for architects. Knowledge of the principles of composition and the structural design of an image can be translated into the design process, and an architectural project created on the basis of an image, or at least based on similar principles, can be considered ideal in terms of visual perception and use. The fascination with Mies van der Rohe's work is precisely a fascination with form, which still fits in with the modern trend today. Therefore, there is no need for exclamation marks. All that is needed is knowledge of the investor's needs and a mature approach to implementing basic knowledge about architectural creation in order for the effect to be lasting, useful, and beautiful. People are eager to see architectural icons, but do they want to live in them? Do they not dream of a well-designed home surrounded by greenery that reduces stress and tension, lowers the risk of depression, and improves mood, cognitive abilities, concentration, and memory?

American artist Ben Shahn said that form is an expression of content, that it conceals meaning, and that it is difficult to come to terms with the state of today's architecture, where form mostly conveys neither content nor the meaning of a well-planned composition. It is not the pursuit of novelty that should guide an architect in their work. It is respect for history combined with creativity, consistency, and communicativeness that will fill what is designed with content. Greenery will be an equal compositional element and not a proverbial mask hiding the architect's mistakes.

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