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PERCEPTION OF THE MODERN MOVEMENT IN ARCHITECTURE AS CULTURAL HERITAGE

Summary. When the definition of cultural heritage in architecture is questioned regarding the perception of society, the results demonstrate that people identify cultural heritage as both material and spiritual achievements in the past and as a reflection of identity associated with historical monuments. Furthermore, the distinction between monument and cultural heritage does not have a well-distinguished definition for society in most cases. Therefore, the perception of people in the appraisal of cultural heritage consistently obscures the protection process, especially regarding the heritage of the Modern Movement era in architecture which started to be seen in the 20th century. While the experts acknowledge Modern Movement artefacts as cultural heritage, in most cases the perception of non-experts differs. Therefore, its architectural merit is not appreciated by society in the way it deserves, neither as an artefact nor as cultural heritage. By both literature review and performed research, this paper aims to analyse the reasons which create deprecation regarding the evaluation of Modern Movement heritage. Furthermore, it tries to suggest a series of actions which can be taken for achieving the protection of Modern Movement heritage.
Keywords: Modern Movement, perception, heritage, strategy, value.

INTRODUCTION

Cultural Heritage in the broader scope can be defined as an expression of living for societies, which they have developed over time and passed from one generation to the next by the customs and practices they have. Furthermore, it can include places, artefacts, architectural objects, artistic expressions and values. Therefore, cultural heritage can be both tangible and intangible, and it can produce tangible representations of intangible values for the people.

According to the Council of Europe, cultural heritage is *a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time.*[1] Regarding this definition, it is possible to state that one of the essential characteristics of cultural heritage, either tangible or intangible, is the reflection of it on both the environment and society.

According to Watson and Bentley, historic buildings and neighbourhoods can connect residents to their roots.[2] Furthermore, they can embed their collective memory and reflect their cultural identity, as well as personal identity. Historic buildings can assure social life and establish the continuity of society and culture. Therefore, it can pass cultural identity to future generations. As Tveit et al. state, landscapes which contain both past and present can provide integrity and quality to the communities who live in that environment.[3] As a result, the sustainability of historical environments can evoke strong images for the society and observers who are experiencing the place.

However, when the Modern Movement and its language evolved in the early 20th century, the impact of the buildings on the environment and the *genius loci* ceased. The language of the Modern Movement was affected by various factors, which were related to the technical, economic and social circumstances of the period. However, one of the most important motivations of architects in this era was the ambition to establish a modern architecture for the modern industrialised society. As Heynen states, the new architecture in the 1920s became associated with the desire for a more socially balanced and egalitarian

form of society in which the ideals of equal rights are represented.[4] However, when trying to establish equality between people and setting universal values, the newly adopted values did not involve traditional associations in freshly formed societies. Therefore, the movement which shaped the society and the architecture in this new era became more secular and progressive. Still, it concurrently disrupted the connection with history and architectural traditions as well as the vernacular architecture.

In a contemporary perspective, devaluation arising from the obsolescence of the materials and functions of these buildings blended with the lack of appreciation in the appraisal of them as cultural heritage by society. However, identifying the factors which are catalysing this negative impact on people's perception is not always clear. Therefore, this paper aims, both by literature review and performed research, to analyse the reasons which create deprecation regarding the evaluation of Modern Movement heritage. The paper begins with the definition of cultural heritage and its value. In the following section, it gives information about the language of the Modern Movement and tries to identify the characteristics which make its appraisal different from other cultural heritage objects from earlier eras. Subsequently, the paper explains the outcomes of research which took place in Kaunas, Lithuania in 2019 regarding the identification of people's perception of Modern Movement heritage by the usage of various experiment techniques, such as social survey and eye-tracking technology. The paper then discusses possible solutions and approaches for the protection of Modern Movement artefacts which can be valuable in the protection and continuity of these structures.

CULTURAL HERITAGE AND ITS VALUE

In her book 'Uses of Heritage', Smith states that there is no such thing as heritage and heritage had to be experienced for it to be heritage.[5] Even though this statement might seem assertive, it is true that heritage only stays alive if it is performed and practised, and there is a perception which innates that cultural value of the heritage is tied to time depth,

monumentality, expert knowledge and aesthetics. According to the survey implemented by the Polish Ministry of Culture and National Heritage Department regarding the perception of Polish people on cultural heritage in 2012, the participants of the study identified cultural heritage as both material and spiritual achievements of a particular social group, and a part of the past, which is a testimony to people's identity, mostly associating the concept with historical monuments. As Goral states, examples given by the participants were primarily architectural objects of great importance to the history and cultural identity of the nation.[6] This perception is not limited to Polish society, and most people tend to relate heritage with monumental architectural objects. Therefore, this perception establishes a misunderstanding in societies, and it results in people not giving cultural heritage the importance that it deserves in many cases. One of the leading characteristics of heritage is that it is a carrier rather than a solid concept, and it only endures when it has been used daily and perceived by society itself.

Over the centuries, the concept and the treatment of heritage and approaches to conservation of it changed as values changed. One of the first people who tried to work on different values of cultural heritage is Riegl, who wrote a study to define the theoretical aspects of the work.[7] In his work, he described the development of the concern for monuments in a historical context and identified the different distinguished types of values which are essential for the process of cultural heritage conservation. Even though the values he coined appear to be accurate (Can be seen in Fig. 1), some of them might be relative. The age value of a building has evidence which demonstrates how long that building has been around; furthermore, it might also depend on the contrast between the new and modern. Moreover, the historical value might depend on the nation from time to time. A building or a monument can contain meaning for a nation, but not for other nations. Therefore, while trying to decide what to preserve and what not to, it is crucial to understand the buildings in their own conditions and their own environments. Moreover, artistic or art value of heritage might be relative in some sense

as well. The heritage which has value might not have the criterion of the understanding of aesthetics in contemporary meaning. However, it might still be unique for the period it has been established. Therefore, values which were given to cultural heritage are contingent; furthermore, they can only be understood by the reflection of them in societies. As a result, all these values which have been decided by scholars do not always have the representation of them in societies. However, they provide the classification which is needed (Fig. 1).

As it can be evaluated from the table, the criterion which was used in the 1990s is more about the theoretical classification for identifying values, rather than demonstrating the impact of cultural heritage in practice. As Gibson states, *the value is not an intrinsic quality but rather the fabric, object or environment is the bearer of an externally imposed culturally and historically specific meaning, that attracts a valued status depending on the dominant frameworks of the value of the time and place.*[8] Therefore, the commemorative value that Riegl defined in the early 20th century is one of the essential qualities of the heritage. However, it has the emphasis on the monuments or symbolic constructions as memorials rather than the cultural heritage that societies have and experience daily. Furthermore, the set of classifications which has been assembled in the contemporary perspective does not have the ingredient of the peoples' perception of heritage, such as the memento value. As Freidheim & Khalaf state, the value-based

approaches in the evaluation of cultural heritage tend to fail, because the decisions are based on incomplete understandings of heritage and its values.[9] Furthermore, according to the proposed model of Stephenson, cultural heritage can be systematically classified by forms, relationships and practices.[10] This typology intends to establish an attempt to capture how both experts and non-experts perceive heritage. Furthermore, it covers the interpretation of cultural heritage related to identity, memories and sense of place. As a result, combining value-based approaches with memento value and redefining the classification with the aspects related to the interpretation of society can capture the full range of the perception. Buildings, artefacts and environments and the meanings they represent are often integrally tied to the identity and the memories of society; therefore, while analysing the value of the heritage, it is essential not to omit the invisible social context.

Heritage by itself can rarely hold its intangible peculiarities if it is not adequately managed, moreover, if it is not perceived as cultural heritage by society. In most cases, the impact of the invisible social context while considering cultural heritage evaluation has been given lower priority because it is hard to measure. Nevertheless, one of the most important elements which define the cultural heritage is people's perception. In that regard, the Modern Movement heritage is also ambiguous because they lack the perceived inherent value and memento value for society. Therefore, these characteristics of

RIEGL(1903)	ATHENS CHARTER(1931)	VENICE CHARTER(1964)	AMSTERDAM DECLARATION(1975)	APPLETON CHARTER(1983)	NARA DOCUMENT(1994)	SAN ANTONIO DECLARATION(1996)
AGE	HISTORICAL	HISTORICAL	CULTURAL	CULTURAL	CULTURAL	TESTIMONIAL
USE	ARTISTIC	ARTISTIC	HISTORICAL	AESTHETIC	ARTISTIC	HISTORICAL
NEWNESS	AESTHETIC	AESTHETIC	IDENTITY	CONTEXTUAL	HISTORICAL	IDENTITY
HISTORICAL		ARCHEOLOGICAL	SOCIAL	ARTIFACTUAL	SOCIAL	SOCIAL
COMMEMORATIVE			AESTHETIC		SCIENTIFIC	ECONOMICAL
						DOCUMENTARY

BURRA CHARTER(1998)	FARO CHARTER(2005)	QUEBEC DECLARATION(2008)	NEW ZEALAND CHARTER(2010)	UNESCO WORLD HERITAGE CONVENTION DOCUMENT(2017)		
HISTORICAL	REMEMBRANCE	SOCIAL	AESTHETIC	MONUMENTAL	SYMBOLICAL	AESTHETIC
SCIENTIFIC	HISTORICAL	HISTORICAL	ARCHITECTURAL	SCIENTIFIC	TECHNOLOGICAL	SCIENTIFIC
AESTHETIC	IDENTITY	CULTURAL	ARCHAEOLOGICAL	COMMEMORATIVE	TRADITIONAL	ETHNOLOGICAL
SOCIAL	CREATIVITY	POLITICAL	SOCIAL	SPIRITUAL	HISTORICAL	ANTROPOLOGICAL
SPIRITUAL	ECONOMICAL	SPIRITUAL	FUNCTIONAL			
CULTURAL		ARTISTIC	HISTORICAL			
		ENVIRONMENTAL	LANDSCAPE			

Fig. 1. The classification regarding the values of cultural heritage which was suggested by different organisations

the Modern Movement establish a paucity in the appraisal of its artefacts as cultural heritage.

THE MODERN MOVEMENT AS CULTURAL HERITAGE

According to Gusevich , the Modern Movement was based on the elimination from the illiterate society of the bourgeois culture that applied pretentious ornament and kitsch to architecture, which took the form of eclecticism.[11] Therefore, the usage of decorative elements and ornaments from different architectural periods in an eclectic approach motivated the architects of the time to work towards a new architectural language which would be applicable all around the world.

However, creating an international style required making changes in the existing language of architecture which had been in use for centuries. According to Zevi, the classical language in architecture contained numerous variables such as symmetry, perspective and proportion.[12] However, the language of the Modern Movement was based on variables, and even if the function was the same, it was possible to express the characteristics of the same function in various ways. Therefore, the new architectural language which was established in this period was formed by the creation of an inventory which helped to produce free mass, free surface and free plans. Le Corbusier, one of the pioneers and the creators of the language of the Modern Movement, explains in his book 'Towards a New Architecture' that architects should be given three reminders when using the language of architecture. These reminders are; mass, surface and plan. According to Le Corbusier, the interaction between these three elements establishes the architectural object.[13] As he states, mass and surface are the elements that architecture itself manifests, and the plan determines these two elements. However, when the interaction between the plan and surface is analysed in the language of the Modern Movement, it is possible to state that even though the plan is functional for the users, in most cases the surfaces are not as functional as the plan. Furthermore, most of them do not reflect or represent culture or memento for the people even though

they are the elements where people have their first interactions with the structures.

What façade represents to people, or even the importance of the façade in the scale of the city, was understood differently by some architects in the Modern Movement period. As Tozer states, Adolf Loos regarded ornament convenient for applying to the public buildings, however not for residential buildings, because, according to Loos, the blank façades of residential buildings could operate as a mask, so that, the inhabitants could lead their own private lives, while public buildings needed to communicate their functions.[14] However, residential buildings also have a reflection in environments, and they cooperate in the establishment of the image of the city. Furthermore, as Maria Szadkowska quoted from an interview of Adolf Loos, he stated that "*I never play around with the façade, that's not where I live. Take out your chairs, sit in the middle of the street in the rain and look at the façade. If I make a façade toward the street, I try to make the ground floor nice, at most put marble around the floor above it. Above this level I leave it bare, I can't see that far myself…*"[15] Therefore, even though façades are the elements where people have their first interactions with the structures, and they are the displays of the design for the people who are living in the environment, most of the time Modern Movement surfaces and the language it used were ambiguous and did not reflect the interior or the characteristics of the people who inhabit them, which eventually prompted problems and discussions about them.

One of the problems that occurred with this modern architecture was an argument about the systems and the form languages which were adopted by this style not having been sufficiently tested or proven. The most specific example of that was the use of horizontal windows and flat roofs, which were incorporated in many designs. Traditionalists argued that vertical windows light rooms more efficiently. Furthermore, the flat roofs were not achieving the goal of conducting the water away from the façade, protecting it from weather conditions. Therefore, these forms were not functional. As Michl stated at a conference which took place in the United Kingdom in 2011, although the idea of functionalism in modernism

is seemingly aimed at the user, the root 'function' in 'functionalism' is provided as a classification of the place where the forms are to be extracted.[16] Therefore, it was not firstly about the function itself, but it was more about the form. As a result, the architectural language that the Modern Movement adopted was not aimed at the user. In that regard, the Modern Movement can be criticised. However, in the implementation of the Modern Movement, it is possible to trace different representations in different countries.

The second problem was the language of the Modern Movement, and its attempts on establishing a universal language, and an international style which was functional for everybody. However, the universal language did not correspond to the perception of the aesthetic values of every society. According to Benevolo , Persico states that if someone wants to consider an architecture which is apart from the aesthetic formulation, rather than speaking about internationalism, they should return to the concept of a world that is entirely rational and intelligent.[17] The expression of the Modern Movement was overly rational, and it was defined by material facts, rather than the spiritual and cultural impacts of architecture on people. Consequently, the Modern Movement, in general, did not seem dependent on local historicity or on any national vernacular architecture, which established weakness in this style. Most of the time, being international has been criticised as forcing society for being identical and independent of local traditions. As Carrera states, the built environment which is dysfunctional for people is often the symptom or the result of the designers conflicting with the people using it.[18] As a result, when the buildings stopped considering the geographical values of the environment, they started to lose their local characteristics. At the same time, they lost the peculiarity of being functional for the people who are inhabiting in that area. However, it should be possible to establish the form of the buildings related to the function which would also be suitable for the users and their requirements. Furthermore, adopting universal values but at the same time using the traditional patterns can manage to create an architecture which is sensitive towards the values of the users.

In his Gentle Manifesto, Venturi states that "Space and elements in architecture become readable and *workable in several ways when it is 'both/and' instead of 'either/or'*".[19] However, having both/and should not mean that the design needs to contain everything which can result in the creation of eclectic architecture. It implies that it is possible to consist of various elements as long as it does not affect the design itself. The both/and approach was not used in the Modern Movement, especially in the sense of ornaments, since the discourse was based on simplicity and ornaments seen as if they were intricate. However, ornaments are not alleged to interfere with the simplicity, but they can also establish simplicity when they are used in the right places with the right intentions. In that regard, the usage of ornament in architecture is even possible in the Modern Movement. Furthermore, some different dialects occurred in the language of the Modern Movement, which contains ornaments and uses both form and pattern languages for expression.

As Salingaros states, along with the many other changes that occurred with the industrialisation of the building process in the 20th century, traditional form languages around the world were lost.[20] Developments in construction technology, engineering, building materials such as steel, iron and plate glass, culminated in a functional style, and this changed the way architects see the design. The form languages that were applied in the previous approaches started to transform into a new language by the usage of modern materials and techniques. However, the aim of the Modern Movement was not establishing a style, but more about developing a language which can be implemented universally. As Habermas states, modernity and modernism assumed that the present is a new era, therefore, it is not a continuation of the past. Still, instead, it tends to grow out of the rupture with the past and traditions.[21] Consequently, modernism in architecture focused on defining transformations in building design, which involved changes in the traditional forms, materials and construction techniques of the past for establishing the new era. As Gropius states, emphasising architecture on individuals might be a wrong approach; the ambition to develop a unitary

view of the world can underline the requirement to free the values of spirit from individual restrictions.[22] However, according to Hitchcock, this approach established placelessness, which can be cited as the spirit of the Modern Movement at its time.[23] The language and the meaning of architecture are the reflections of cultural, environmental and traditional values. Thus, these values are essential while establishing a functional construction and freeing the values of spirit from individual restrictions can have consequences. The function is the way of expressing desirable living conditions of the users in physical forms; moreover, if the built environment is not suitable for the everyday life of the users, people might eventually attempt to change it to be more convenient for themselves. Therefore, the transformation in building design associated with the Modern Movement, which created changes in traditional forms, established different outcomes as well as problems in the perception of the expression of Modern Movement language.

As Salingaros asserts, even though the minimalist modernism was triumphant in its own terms with the clearly defined geometrical expression, which is related with the strong form language, it was ignoring or not trying to accommodate the human patterns (Fig. 2). Ultimately, it was incompatible with the pattern language Alexander identified. He also states that the approach in 20th century architecture

was replacing or refusing the pattern language, which was the result of evolutionary development.[24]

As Richards states, people are more likely to admire what is already familiar to them and that they can classify in their own circumstances.[25] Therefore, containing ornaments and traditional plan schemas would help people to classify easier. Furthermore, it is still possible to see the pattern language in the form of ornament or in the form of plan schemas in the Modern Movement which demonstrates that the Modern Movement did not deny all modes of traditions or culture while it was trying to express the design in a modernist form language in its different dialects.

When the Modern Movement started to be seen in the architectural sphere, the attitude towards this movement was detracting and not affirmative among some of the critics. The buildings of the Modern Movement were accused of being bleak, austere, and uniform. In this period, the Goldman and Salatsch building of Adolf Loos was one of those structures which captured most of the critiques. According to Frampton, the cartoon which was published in 1911 suggested that the façade of the building was not that different from a maintenance hole cover on the street.[26] Furthermore, as asserted by Whalen, due to not carrying ornamentation above the windows, the emperor allegedly stated that the building had no eyebrows. Moreover, Schaukal, who is one of the

Fig. 2. Villa Savoye (Photograph from the official website of Le Corbusier Foundation)

allies and supporters of Loos, wrote that constructing a façade which is sober, unadorned and naked like this building requires courage.[27] Therefore, even from the beginning, the critics' approach towards the Modern Movement and the structures which do not contain ornaments was as sceptical as that of the wider society.

As architect Kim Smith states in the documentary "Coast Modern", ninety per cent of people do not want to live in or relate themselves to a modernist house.[28] One of the reasons for that can be explained by the fact that people cannot establish the bond they need with modernist buildings, or with the environment these buildings are in, which even affects the perception of it as cultural heritage when the buildings become older. Nevertheless, Modern Movement buildings can be considered as more human-friendly and more closely connected with the outside, which is by design, and due to the usage of new materials and specifically the usage of a considerable amount of plate glass, which differs from traditional buildings. While traditional houses are more akin to shelters which separate people from the outer world, the primary focus of the Modern Movement was expanding the inner space to the outside by large apertures, and the aim of the architects was creating a feeling of spacious design for the users. However, this characteristic of the Modern Movement only establishes an impact on the user of that building, but not on the people who are inhabiting in that environment. As a result, artefacts of the Modern Movement do not have as much of an effect on the built environment they are situated in generally.

One of the consequences of not significantly affecting the built environment is also not having much of an impact on the life of the people who inhabit that environment. Therefore, it is possible to state that most buildings designed by Modern Movement criteria cannot as easily establish a place in the collective memory of societies. However, this can also be the result of the fact that the extant Modern Movement buildings do not contain age-value, because the Modern Movement only started to be seen in architecture in the early 20th century, and this factor should not be disregarded. However, it still influences its perception as cultural heritage in society,

furthermore, it impacts its preservation process. As Campbell states, it is easy to create shapes and forms in architecture but giving those shapes and forms any meaning is complicated. By not connecting shapes to any tradition, they would lack an essential frame of reference and also require site-specificness.[29] Therefore, even though the architectural expression of the Modern Movement is considered successful, it creates a scarcity of associations with collective memory and traditions.

As a consequence, it generates an architecture which is possible to implement anywhere in the world, which interferes with the perception of beauty, since it is not designed for the society it is implemented in. As a result, the language that the Modern Movement uses loses its meaning, which could have assisted people in establishing a bond and place attachment. Moreover, arguably most of the time, the first impression people are left with from the Modern Movement does not involve the feeling that it is cultural heritage.

As Rampley states, the difference between heritage and history lies in the fact that the former negotiates a relation to the past, primarily through reliance on reified symbols of the past.[30] One of the ways to establish this relationship is through the surface. As Le Corbusier states, especially surface in architectural objects, gives individuality to the mass.[31] However, when the surfaces of this movement are evaluated, the sensation they provide is not of individuality. In that regard, it can be asserted that the Modern Movement has achieved the aim it was focusing on. However, it also established a feeling in society that the heritage of this movement does not have the memento value which would help people to connect themselves with constructions.

Even though the Modern Movement era represents a paucity of memento value, specialists incline to preserve the artefacts of this period. As Mörsch states, no time in history does not reflect the period by its architecture.[32] Therefore, the artefacts of the Modern Movement, too, have the importance of historical documents. In some cases, iconic architectural objects of the Modern Movement have been granted the label of World Heritage even only ten

years after they were constructed. The architecture and ideology established by the Modern Movement are, to some extent, a social reform, which secures the evaluation of its objects as cultural heritage by the heritage community, thereby emphasising their importance. However, society does not regard this style as heritage in most cases. According to Hoffman, Charles Jencks states that hybridity of the form allows for different kind of receptions, and it extends the language of architecture by speaking to the elite and at the same time to ordinary people.[33] However, the language of the Modern Movement does not contain this hybridity. Therefore, as this study suggests, it does not speak to non-experts, and it does not give the impression to ordinary people that it is worth preserving. As a result, the process of preserving modern heritage becomes contentious due to the language it uses.

According to Cunningham, over recent decades the Modern Movement artefacts have been more at risk, when compared with the built heritage of any other period in history.[34] Furthermore, as it has been stated in the introduction section of the 10th DOCOMOMO (DOcumentation and COnservation of buildings, sites and neighbourhoods of the MOdern MOvement) Conference Proceedings, the challenge about the artefacts of the Modern Movement era is the difficulty to maintain the architectural creations and the intentions of them such as the continuously changing concept of it. Therefore, they require a distinctive

approach which can revalue the manifestations, and redefine the meanings of it. The Modern Movement is not just a style, but it has a dominant discourse which makes it a movement rather than merely a style. Therefore, these peculiarities establish an aporia while preserving them, even though it contains all the essential ingredients which makes it possible to adapt them to new conditions.

DOCOMOMO International, which is one of the independent organisations, has undertaken the mission of establishing criteria and documenting Modern Movement artefacts accurately. In its criterion standards, the organisation tries to place emphasise the technological, social, artistic and aesthetic merit, and furthermore, referential value, and integrity of the artefacts of this era. Additionally, the increasing number of Modern Movement buildings being protected and registered by UNESCO establishes an impact. However, while recognition of organisations and commissions such as DOCOMOMO and UNESCO can help to protect the buildings from demolition and exploitation, it might not be enough for the communities to acknowledge the value of these artefacts and promote them for cooperating on their safeguarding. Furthermore, these artefacts still need to be guarded against the effects of time, weather, improper repairs and management. As a result, adaptive re-use is still a vital intervention and demands to be adequately implemented by experts and by the participation of the society who are

Fig. 3. The building at Miško Street, 16, which was demonstrated in the experiment

living in that area. However, an appropriate adaptive re-use strategy for the artefacts of the Modern Movement is still ambiguous.

ANALYSIS OF THE PERFORMED RESEARCH

The research which aimed to understand the perception of people regarding modern movement heritage took place in Kaunas, Lithuania in 2019.[35] The research involved the usage of eye-tracking technology for understanding what are the specific areas which catch the attention of people when they are looking at modern movement buildings, and how these areas are affecting people's evaluation. Thirty-seven students of Kaunas University of Technology participated in the experiment with age ranging between 18 and 30 with the distribution of 18 females and 19 males. The buildings which were chosen to demonstrate in the experiment were all buildings from Kaunas, which has been on the tentative list of UNESCO since January 2017 (Fig. 3–5).

Fig. 4. The building at Kęstučio Street, 3, which was demonstrated in the experiment

Fig. 5. The building at E. Ožeškienės Street, 13, which was demonstrated in the experiment

According to the research, the areas which caught the attention of the participants the most were the ornamented areas on the facades of the buildings (The expression of the Modern Movement in Kaunas contains the usage of ornaments) (Fig. 6) and expressive architectural elements such as porthole windows, pediments and the main entrances (Fig. 7).

Furthermore, the analysis also demonstrates that when the façades contain blank surfaces, most of the gaze does not scan these areas. The participants are still more likely to focus on the openings or the lines on the façade (Fig. 8).

All these areas where participants either focus or not give us information regarding what people are

Fig. 6. An example sheet of the eye-tracking experiment which demonstrates the fixations

Fig. 7. An example sheet of the eye-tracking experiment which demonstrates the fixations
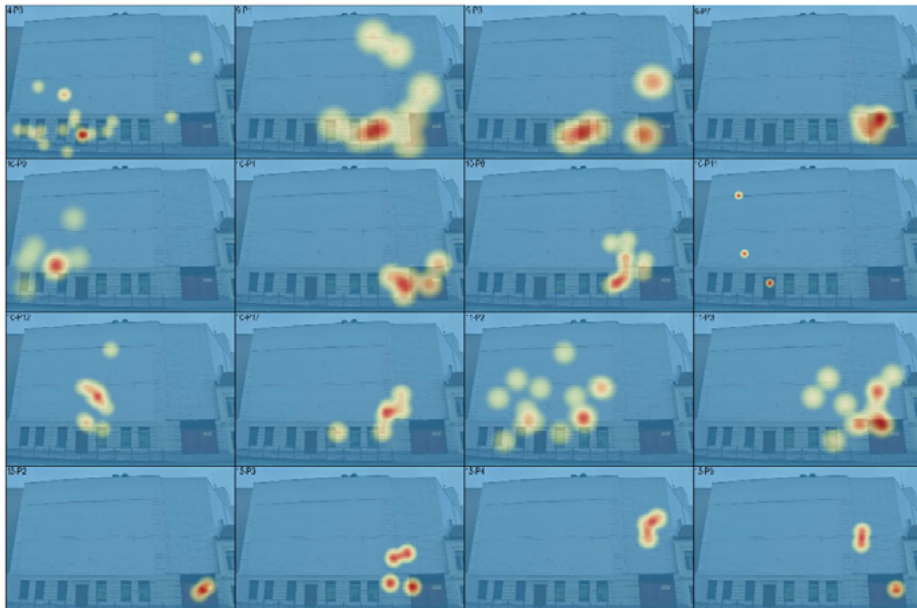
Fig. 8. An example sheet of the eye-tracking experiment which demonstrates the fixations

looking at when they are asked the question if a building is cultural heritage. The research does not aim to generalise the results; however, it attempts to identify the areas which are affecting people's perception.

DISCUSSION AND RECOMMENDATIONS

One of the colossal problems with the protection or adaptive re-use of the Modern Movement artefacts is the new regulations in building design. Nowadays, the performance value of the buildings, such as energy sustainability, is an essential quality for the buildings; however, most of the buildings constructed in this period do not contain this requirement. The large glass areas and materials which do not provide thermal efficiency for the structure affect energy sustainability. Therefore, even though the buildings perform well in their own specifications, in the adaptive re-use, it yields a challenging process to create a project which blends the obligations with original design. Furthermore, the materials which have been used in the Modern Movement buildings tend to be not as durable as the buildings of the previous era. Usage of weak concrete, alumina cement and synthetic paints is commonly seen in this period. Moreover, experimental and not well-determined materials have been implemented in the designs. Therefore, these materials are susceptible to degradation, and they require different intervention

methods for their long-term protection which needs to be well-identified individually.

Another problem is the number of the artefacts produced during this era. According to Carmichael, there are approximately 300 surviving works just of Frank Lloyd Wright alone.[36] Furthermore, as Wessel de Jonge states, more buildings were constructed in the 20th century compared with the number of buildings constructed during all prior periods.[37] Therefore, assigning new uses for these buildings, which would be feasible and at the same time suitable also becomes arguable. Furthermore, the artefacts of the Modern Movement are not merely limited to the iconic buildings, but there are innumerable examples in residential and industrial neighbourhoods. Therefore, maintaining these buildings and re-using them as museums or tourist attractions is not economically feasible.

It is essential to involve society in action, so that it would be possible to enhance the image by providing more information about the building which would derive more social involvement. In the case of Modern Movement heritage, implementing memory points, which can be used for both providing and receiving information, around the surroundings can be valid. Designing memory points as spaces where people can spend time and look through books and leaflets might make these points more attractive to

the people. Furthermore, establishing various strategies for different age groups is also essential. Therefore, implementing an approach like this can help to use the community involvement both passively and actively in the management of Modern Movement heritage. Therefore, adoption of an approach which emphasises the importance of this architectural style in architectural history with all of its aspects and impact on social life might be a way to encourage people to understand its value.

In recent years, society participation has become a more critical element in the evaluation and preservation process of cultural heritage. When people cannot relate with the construction or the environment, the process of achieving preservation, therefore, becomes more difficult, especially when Modern Movement architectural objects are involved. Educating people about the Modern Movement could have a noticeable impact on the perception of it, moreover on the preservation of these heritages.

CONCLUSION

As stated in this paper, one of the most problematic components of Modern Movement heritage is the fact that the buildings from this era lack the perceived inherent value and memento value for the people by not using traditional elements and materials in its language. The artefacts from prior periods tend to have an official stance, but the buildings with Modern Movement expression do not contain any remark of cultural memory nor are they determined as historical documents by the people, which results in deprecation. Furthermore, as the literature review and prior research demonstrate, Modern Movement structures also contain ambiguous features which make the appreciation of these structures complicated. However, even though non-experts and ordinary people might not appreciate the architectural artefacts of the Modern Movement, it created its own scale of values in architectural history, and it is worth passing on to future generations.

It is crucial to understand what people perceive and what is significant for them when they evaluate heritage buildings, therefore, researching or applying strategies to these artefacts require the establishment

of new tools and methods, and furthermore, different identification and selection criteria. When the cultural heritage of the Modern Movement is well expressed to non-experts, the consequences resulting from its paucity on perceived inherent and memento value might be solved.

References

Benevolo, Leonardo. *History of Modern Architecture*. Massachusetts: M.I.T Press, 1989.

Campbell, Robert. "Why Don't the Rest of Us Like the Buildings the Architects Like?" *Bulletin of the American Academy of Arts and Sciences* 57 (2004): 22–25.

Carmichael, Bradley T. "When Modern Becomes Historic: Preserving the Modernist Building Envelope". *Journal of Building Design + Construction*, (2012): 40–46.

Carrera, Fabio. "Is the Lamp of Memory still burning? Memory in Architecture and in Urban Design." *MIT: Department of Urban Studies and Planning*, 1998.

Cunningham, Alan. *Modern Movement Heritage*, DOCOMOMO. London: E&FN Spon Publishing, 1998.

De Jonge, Wessel. "Sustainable Renewal of the Everyday Modern". *Journal of Architectural Conservation* 23 (2017): 62–105.

Doğan. Huriye Armağan. "Implementation of eye-tracking technology on cultural heritage research and practice". *Journal of Creativity Games* 7 (2019): 16–21.

Frampton, Kenneth. *Modern Architecture: A Critical History*. London: Thames and Hudson Press, 1992.

Freidheim, L. Harald and Khalaf, Manal. "The Significance of Values: Heritage Value Typologies Re-examined". *International Journal of Heritage Studies* 26 (2016): 466–481.

Gibson, Lisanne. *Valuing Historical Environments*. Farnham: Ashgate Publishing, 2009.

Góral, Anna. "Cultural Heritage in the Cobweb of Meanings", *Heritage 2014 – Proceedings of the 4th International Conference on Heritage and Sustainable Development*. Barcelos: Green Lines Institute, 2014.

Gropius, Walter. *Internationale Architektur*. Munich: Albert Lange Press, 1925.

Gusevich, Miriam. "Purity and Transgression: Reflection on the Architectural Avantgarde's Rejection of Kitsch". *Discourse* 1 (1988): 90–115.

Habermas, Jürgen. *The Philosophical Discourse of Modernity*. Massachusetts: MIT Press, 1987.

Heynen, Hilde. "What Belongs to Architecture? Avantgarde Ideas in the Modern Movement. *Journal of Architecture* 4 (1999): 129–147.

Hitchcock, Henry-Russell. *International Style*. New York: Norton Press, 1966.

Hoffmann, Gerhard. *From Modernism to Post-Modernism: Concepts and Strategies of Post-Modern American Fiction*. Amsterdam: Rodopi Press, 2005.

Le Corbusier, *Towards a New Architecture*. London: John Rodker Publisher, 1931.

Michl, Jan. "The Modernist Idea of Architecture" (paper presented at Plymouth University School of Architecture, April 7, 2011).

Mörsch, Georg. *Das Neue Bauen als Herausforderung an die Denkmalpflege*. Berlin: Unsere Kunst-denkmaeler, 1990.

Rampley, Matthew. *Heritage, Ideology and Identity in Central and Eastern Europe*, Woodbridge: Boydell Press, 2012.

Richards, Jonathan. *Façadism*. Oxford: Routledge Press, 1994.

Riegl, Alos. *The Modern Cult of Monuments: Its Essence and Its Development*. Wien: K. K. Zentral-Kommission für Kunst- und Historische Denkmale: Braumüller, 1903.

Salingaros, Nikos. *A Theory of Architecture*. Solingen: Umbau-Verlag Harald Puschel Press, 2006.

Smith, Laurajane. *Uses of Heritage*. Oxford: Routledge Press, 2006.

Stephenson, Janet. "The Cultural Values Model: An Integrated Approach to Values in Landscapes". *Journal of Landscape and Urban Planning* 84 (2008): 127–139.

Tozer, William Richard Eric. *A Theory of Making: Architecture and Art in the Practice of Adolf Loos,* (PhD diss., University College London, 2011).

Tveit, Mari Sundli., Sang, Åsa Ode and Fry, Gary. "Key Concepts in a Framework for Analysing Visual Landscape Character". *Journal of Landscape Research* 31 (2006): 229–255.

Vecco, Marilena. "A Definition of Cultural Heritage: From the Tangible to The Intangible". *Journal of Cultural Heritage* 11 (2010): 321–324.

Venturi, Robert. *Complexity and Contradiction in Architecture*. New York: Museum of Modern Art Papers on Architecture Press, 1966.

Butina-Watson, Georgia and Bentley, Ian. *Identity by Design*. London: Elsevier Publishing, 2007.

Whalen, Robert. *Sacred Spring: God and the Birth of Modernism in Fin de Siècle Vienna*. Michigan: Wm. B. Eerdmans Publishing, 2007.

Zevi, Bruno. *Modern Language of Architecture*. Canberra: Australian National University Press, 1978.

Notes

1   Council of Europe Framework Convention on Value of Cultural Heritage for Society. Council of Europe Treaty Series, no. 199, 2005.

2   Georgia Butina-Watson and Ian Bentley, *Identity by Design*, (London: Elsevier Publishing, 2007), 32.

3   Mari Sundli Tveit, Åsa Ode Sang and Gary Fry, "Key Concepts in a Framework for Analysing Visual Landscape Character", *Journal of Landscape Research* 31 (2006): 229–255.

4   Hilde Heynen, "What Belongs to Architecture? Avant-garde Ideas in the Modern Movement, *Journal of Architecture* 4 (1999): 129–147.

5   Laurajane Smith, *Uses of Heritage*, (Oxford: Routledge Press, 2006), 20.

6   Anna Góral, "Cultural Heritage in the Cobweb of Meanings", *Heritage 2014 – Proceedings of the 4th International Conference on Heritage and Sustainable Development*, (Barcelos, Green Lines Institute, 2014)

7   Alos Riegl, *The Modern Cult of Monuments: Its Essence and Its Development* (Wien: K. K. Zentral-Kommission für Kunst- und Historische Denkmale: Braumüller, 1903), 71.

8   Lisanne Gibson, *Valuing Historical Environments*, (Ashgate Publishing, 2009), 2.

9   L. Harald Freidheim and Manal Khalaf, "The Significance of Values: Heritage Value Typologies Re-examined", *International Journal of Heritage Studies* 26 (2016): 466–481.

10   Janet Stephenson, "The Cultural Values Model: An Integrated Approach to Values in Landscapes", *Journal of Landscape and Urban Planning* 84 (2008): 127–139.

11   Miriam Gusevich, "Purity and Transgression: Reflection on the Architectural Avantgarde's Rejection of Kitsch", *Discourse* 1 (1988): 90–115.

12   Bruno Zevi, *Modern Language of Architecture*, (Australian National University Press, 1978), 3.

13   Le Corbusier, *Towards a New Architecture*, (London: John Rodker Publisher, 1931), 2.

14   William Richard Eric Tozer, A Theory of Making: Architecture and Art in the Practice of Adolf Loos, (PhD diss., University College London, 2011)

15   Website of Adolf Loos Apartment and Gallery, Villa Müller, accessed: October, 2019, https://adolfloos.cz/en/villa-muller

16   Jan Michl, "The Modernist Idea of Architecture" (paper presented at Plymouth University School of Architecture, April 7, 2011)

17   Leonardo Benevolo, *History of Modern Architecture*, (Massachusetts: M.I.T Press, 1989), 494.

18   Fabio Carrera, "Is the Lamp of Memory still burning? Memory in Architecture and in Urban Design." (*MIT: Department of Urban Studies and Planning*, 1998)

19   Robert Venturi, *Complexity and Contradiction in Architecture*, (The Museum of Modern Art Papers on Architecture Press,1966), 16.

20   Nikos Salingaros, *A Theory of Architecture*, (Solingen: Umbau-Verlag Harald Puschel Press, 2006), 220.

21   Jürgen Habermas, *The Philosophical Discourse of Modernity*, (Massachusetts: MIT Press, 1987), 4.

22   Walter Gropius, *Internationale Architektur*, (Munich: Albert Lange Press, 1925), 7.

23   Henry-Russell Hitchcock, *International Style.* (New York: Norton Press, 1966), 36.

24   Nicos Salingaros, 222.

25   Jonathan Richards, *Façadism,* (Oxford: Routledge Press, 1994), vii.

26   Kenneth Frampton, *Modern Architecture: A Critical History,* (Thames and Hudson Press, 1992), 9.

27   Robert Whalen, *Sacred Spring: God and the Birth of Modernism in Fin de Siècle Vienna*, (Wm. B. Eerdmans Publishing, 2007), 166.

28   Coast Modern is an independent documentary by directors Mike Bernard and Gavin Froome produced by Twofold Films in 2012.

29   Robert Campbell, "Why Don't the Rest of Us Like the Buildings the Architects Like?", *Bulletin of the American Academy of Arts and Sciences* 57 (2004): 22–25.

30   Matthew Rampley, *Heritage, Ideology and Identity in Central and Eastern Europe*, (The Boydell Press, 2012), 6.

31   Le Corbusier, 3.

32   Georg Mörsch, *Das Neue Bauen als Herausforderung an die Denkmalpflege*, (Unsere Kunst-denkmaeler, 1990), 5.

[33] Gerhard Hoffmann, *From Modernism to Post-Modernism: Concepts and Strategies of Post-Modern American Fiction*, (Rodopi Press, 2005), 38.

[34] Alan Cunningham, *Modern Movement Heritage*, DOCOMOMO, (London: E&FN Spon Publishing, 1998), 10.

[35] Huriye Armağan Doğan. "Implementation of eye-tracking technology on cultural heritage research and practice", *Journal of Creativity Games*, 7 (2019): 16–21.

[36] Bradley T. Carmichael, "When Modern Becomes Historic: Preserving the Modernist Building Envelope", *Journal of Building Design + Construction*, (2012): 40–46.

[37] Wessel de Jonge, "Sustainable Renewal of the Everyday Modern", *Journal of Architectural Conservation* 23 (2017): 62–105.

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MODERNIZMO PERCEPCIJA ARCHITEKTŪROJE, KAIP KULTŪROS PAVELDE

Santrauka

Kai, atsižvelgiant į visuomenės suvokimą, abejojama kultūros paveldo apibrėžimu architektūroje, rezultatai rodo, jog žmonės kultūros paveldą identifikuoja kaip dvasinius ir materialinius praeities pasiekimus bei tapatybės atvaizdą, kuris siejamas su istoriniais paminklais. Taip pat daugeliu atvejų skirtumas tarp paminklo ir kultūros paveldo apibrėžimų visuomenei nėra aiškus. Dėl šių priežasčių kultūros paveldo vertinimas išsaugojimo procesą dažnai palieka šešėlyje. Tai ypač pastebima modernizmo architektūros atveju. Ekspertai modernizmo artefaktus pripažįsta kaip kultūros paveldą, tačiau ne ekspertų nuomonė dažnu atveju išsiskiria. Tai turi įtakos, jog visuomenė tinkamai neįvertina modernizmo architektūros kaip paveldo ir kaip artefakto vertės. Šiame straipsnyje siekiama analizuoti priežastis, kurios nulemia nykstantį modernizmo paveldo vertės suvokimą tiek literatūroje, tiek atliekamuose tyrimuose. Taip pat straipsnyje pristatomi veiksmai, kurie galėtų prisidėti prie modernizmo paveldo išsaugojimo.

Reikšminiai žodžiai: modernizmas, percepcija, paveldas, strategija, vertė.

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