

Overlooked Heritage: Interiors in Slovakia

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ABSTRACT: The creation of interior spaces is the main cognitive characteristic of architectural creation. Architecture creates a basic spatial framework for the interior. Interior design is a complex type of architectural activity that forms both the space (basically the interior) and the individual elements of the interior space. The professional interior design of architects or designers intentionally creates an environment specifically intended for human life. It is where people are in the most personal contact with the environment surrounding them. Just as an artificially created environment has a strong influence on a person's life and feelings, it has also been proven that it works the other way round as well, i.e. that human needs and demands are a decisive factor in creating space for a person. The case studies demonstrate the development of the interior design in the second half of the 20th century, its current state and level of care given to these works. Architecture from this period has often lost its struggle for survival. As regards the style, these are works in international style, late modern and postmodern, and the local element makes them a unique and attractive testimony to the era. Despite the natural properties of interiors which seldom survive as long as the architecture itself, some contemporary statements about the interior design of the period under review have been preserved. The research focused on the public interiors of both well-known and less-known buildings by Slovak architects from various parts of Slovakia. The research calls attention to the fact that architects worked here even then and their works were of certain quality.

KEYWORDS:

interior, interior design, heritage, memory, renewal, virtual recovery

"It is clear that there can be no separate solution for interior spaces without a parallel creative process involving the entire architectural work. It is a content unit with an indefinable boundary of individual subtasks. Even when evaluating the work, it is not possible to state: It is good architecture with an unsatisfactory layout or bad interior. In such case, it can only be bad architecture."

Vojtech Vilhan

THE THEORY

The creation of architecture is generally multi-layered and often complicated not only with respect to relationships (client - space - time - finance ...), and the surrounding environment but also the current conditions under which the architecture is created. Every client, every assignment is always unique and original. There are several universal principles in interior design, and it basically does not matter whether the interior is public or pri-

vate, whether it is created together with the building or is just a completion of it, whether the task is small or more complex.

The human need for shelter was the very first impulse for any interior space to be created at all. From the beginning, man used the spaces provided by nature. Over time, under the influence of awareness of one's needs, people began to adjust them so that they could use them as a refuge from bad weather or nature. Later, in connection with the development of human thinking, the circumstances and the level of development of the whole society forced humans to artificially create space for the mentioned purposes. There was a need for organized space. The floor was either given (soil, ground) or it was simply modified and the walls, ceiling and roof had to be created. This "primitive" principle essentially applies to the construction of a simple construction of a temple, a palace, and contemporary buildings that create an interior space. Unlike the visual arts and product design, all architectural works create three-dimensional interior space. The individual forms a certain system unit with the environment. The relationship between people

and their environment is complex and multi-faceted, with humans playing an active role in it, as they influence and modify their environment based on the new information and knowledge. Through the active actions of humans interfering with the environment in its original form, the surrounding environment acquires a new form.

As regards the whole range of architectural creation, it is mostly artificial material environment, although its social, natural and other aspects are not excluded. The environment for life and work, which is a synthesis of artificially created environment and nature, is crucial for people and their life. The creation of interior spaces is the main cognitive characteristic of architectural creation. Architecture creates a basic spatial framework for the interior.

In the interior, there is a detailed and intimate perception of the inner space as a whole and also its individual components. The boundaries between architectural and interior design cannot be precisely determined. Their spheres of influence tend to overlap. The professional interior design created by architects or designers and their professional work intentionally creates an environment specifically intended for people that are to live there. It is also where people are in the most personal contact with the environment surrounding them. Since we stay indoors most of the time (it is usually 80%) - we can say that the quality of interiors directly determines the quality of human lives. [1]

Interior and interior design

In addition to architectural nomenclature and architectural definitions, the word interior also refers to interior space in general. It is also sometimes used as a collective noun for indoor furnishings, fittings and equipment. From architectural perspective, the interior space created by architecture and delimited by architectural structures, it is not yet considered interior. It becomes an interior only after its completion and after functional and decorative elements have been supplemented. The interior is intentionally created by a building structure or additionally modified interior space, logically arranged for a given purpose, equipped with equipment elements and systems and designed to satisfy human needs.

Interior design is a complex process that combines the needs of the user with the properties of existing or emerging space. The requisite of this process is the adequacy and appropriateness of the design with respect to the properties of the building. [2] Interior design is a highly specialized field that differs from all other types of design, especially by the fact that in addition to the function, aesthetic qualities and structure of the elements, the interior designer must respond to a specific place. The interior is always linked to its location and it is surrounded by the structures of the building. It was traditionally associated with interior decorations and perceived as a marginal offshoot of architecture. Interior design is a term that covers all types of interior projects and includes everything from building structures to decorations. However, at this moment, this discipline can be divided into three separate specializations: interior decoration, interior design and interior architecture. Of course, these various specializations overlap in many areas. However, the

main difference is in the scope and depth of the intervention into the existing space.

Interior decorations are the art of interior enhancements that give it a certain style (in combination with the architecture). It basically deals only with surface patterns, furniture, textiles, lighting, or materials used. It involves design changes only rarely and to a small extent. A typical example of the use of interior decorations is the design of residential, hotel or restaurant interiors.

Interior design is an interdisciplinary segment that deals with the creation of interior spaces with a certain specific atmosphere and identity. This can be done by adjusting the overall capacity of the space, placing specific elements and finishes. These are mostly projects that involve minimal structural modifications (although this may not always be the case). It is usually an embedded interior that preserves the structural appearance of the space. Typical examples are retail outlets, exhibition spaces or residential interiors.

Interior architecture is associated with the reconstruction or revitalization of existing buildings, or with emerging architecture. In any case, it is about access to space, its structures and the principles of its organization. It links interior design and architecture and solves the differences, especially because it comprehensively addresses structural, technical as well as environmental and social questions. This applies to a number of different types of projects, e.g. museums, galleries, administrative interiors, interiors in the commercial sphere, but also households. Therefore, these are the three different but related disciplines, each of them with its own specific characteristics. However, they all have one point in common: they are closely linked to a given place. [3]

The relationship between architecture, interior and design

The established practice of the interaction of architecture, interior and design perceives environment as a whole - one object-spatial unit with its own internal characteristics and as a purely material and physical phenomenon. This is the conventional approach that is usually considered professional, although when examined more closely, it seems rather mechanical and formal. Things that can fill a space are infinitely varied, with a range of technical equipment and interior decorations.

The claim that architecture shapes the space and design shapes the objects that fill such space does not explain the specific character these two areas of work. The space and objects within are not an isolated phenomenon. The structure of a space is often determined by a whole set of objects. At the same time, however, it is true that architecture involves more than just solutions to spatial tasks and architectural (interior) environment is just one of many in which design objects can be utilized.

Just as we can hardly imagine a purposeful and functional interior without everyday objects (a chair, a door handle, a lamp or a clock on the wall), which are always the result of the designer's work, similarly, design extends into the field of interior

design, which fact can observe on a wide scale of design application. Interior design is a complex type of architectural activity that forms both the space (basically the interior) and the individual element used to furnish and decorate it. The design is applied in the interior in the form of interior construction elements and especially in the furnishing elements, such as furniture, lamps and interior accessories, which can be summarized under a common term - the design of interior elements. [4]

The perception of interior space

The basic feature of architecture is its three-dimensionality or the creation of interior space. The specific nature of architecture as an art form lies in the synthesis of a lot of information and facts and their transfer into the final architectural work. The resulting creative process must be subordinated to the main purpose - the creation of the unity of people and their environment, while taking into account all the requirements and needs of such people.

The interior is always delimited by architectural structure, which gives the interior the basic spatial characteristics and determines the size, shape and proportions of the interior. The interior space is defined directly by the peripheral structures of the building or by various internal structures (supporting or additional). In interior design, the shape, dimensions, function or principle of construction are the basic starting point for a creative approach. In the subsequent stage, it is necessary to include not only the influence of other qualitative factors, e.g. lighting, colour, material, but also to combine the interaction of all the elements contained in it. [5]

The perception of space is influenced by the mutual interaction of space and its observer. Human body perceives and processes information that is obtained by its signal systems. The environment is characterized by various parameters - luminosity, acoustics, temperature, sensory thresholds, light and colour contrasts, haptic properties, etc.

Energy impulses (a sense of light, colour, visual or tactile sensation, etc.) create a response in the form of perception, association, memories, ideas, etc., which results in a specific mental state - mood. The interaction of a person with their environment and its level can be referred to as the associative level, i.e., the level that is connected to human memory and imagination.

In addition to the fact that artificially created environment has a strong influence on people's lives and feelings, it has also been proven that human needs and demands are a decisive factor in the creation of space for a person. Architects create for people and therefore the application of psychology in their work is objectively interwoven with questions of form, construction, economics, sociology, etc.

When interiors are evaluated by their users, the length of use or stay, i.e. the length of their perception of the space, plays an important role. In case of interiors with a short utilization by the users, the spatial effect of the interior as a whole is more important. However, even the smallest details become very important for interiors intended for long-term stay.

Considering the basic characteristics of the interior, which are size and shape, and the spacial composition, it is possible to distinguish interiors with space that is spatially uniform or unified - that is, one that can be entirely covered by one's view, or space composed of two and more parts that are "put together". A unified space is associated with feelings of security and closeness. A compound space and especially varied spatial structures evoke the feeling of freedom and boundlessness, but also a certain sense of unrest and insecurity. [6]

THE RESEARCH

During the research, we have observed basically the same phenomenon occurring repeatedly. They were often peculiar, but also similar because of the fate these works met. The case studies demonstrate the development of interior design of the second half of the 20th century, its current state and the level of care given to these works.

Many works of architecture of the second half of the 20th century, often pejoratively referred to by its opponents as communist-era architecture, have lost their fight for survival. As to the style, they are in "international style", late modern and postmodern, and it is the local element that makes them a unique and attractive testimony of the time. Nevertheless, architecture has at least a chance that it might last for centuries. In contrast, the useful life of interiors is calculated in years, in decades at most. Despite this natural characteristic some statements about the interior design in the given period under review have surprisingly been preserved. It is paradoxical that the inactive force of "carelessness" that allows for great architecture to decline and decay is the same force of passivity that has enabled some works of interior design to survive almost untouched.

THE LAST TESTIMONIES

Case study of Vojtech Vilhan and Rastislav Janák

The work of our most important authority on interior design, also in connection with the development of the interior school in Slovakia - interior designer Professor Vojtech Vilhan, the author of many exceptional interior designs, has only been preserved in his last remaining work, the interiors of the buildings of the new Matica Slovenská. Many of his iconic works slowly have disappeared over time, such as Expo Koliba, which represented Czechoslovakia at the World's Fair in Montreal (1967), the Government Lounge of Bratislava Airport (1973), which was saved from complete destruction by its dismantling in 2015 and subsequent storage in the deposits of the Design Museum located in Hurbanove kasárne.

The interior of the offices of the National Council of Slovak Republic in the building at the St. Nicholas Gate of Bratislava Castle (1978), created with the participation of prominent architects (Rastislav Janák, Oľga Janáková, and Ivan Petelen) provides a strong period record of Vilhan's contemporaries and students. Comprehensive reconstruction of former farm buildings provided space for a work whose every detail was thoroughly thought-out and which in many aspects resembles the inside space of a spaceship from a science fiction movie. Alt-

hough this particular interior has celebrated the 40th anniversary of its creation, it continues to be an exciting presentation of expressive embodiment of representative areas as well as our local reaction to the high-tech movement in world architecture. It is obvious that despite its unquestionable qualities, this interior has already been showing signs of wear and tear and the need for renovation. However, its preservation in its current state it is already unique in itself, and its value is further enhanced by the fact that it is one of the last joint projects of the married couple of architects Mr. and Mrs. Janák and Ivan Petelen. [7, 8]



Figure 1: Offices of the National Council of the Slovak Republic, Bratislava Castle, Luginsland Bastion. Current state of the interior. Photo: Dušan Kočlík



Figure 2: The Ceremonial Hall of Zichy Palace, Ventúrska Street in Bratislava. Current state of the interior. Photo: Dušan Kočlík

Another work, the last of its kind, is the interior of the Zichy Palace in Bratislava. The reconstruction from 1990 by the architects Oľga and Rastislav Janák and architect Anna Tomašáková, who won the Dušan Jurkovič Award (1991), is now a well-preserved example of built-in period interior. The nature of its public function has ensured, so to speak, its low technical wear and tear, and although the interior has undergone several rather unfortunate interventions, at least the ceremonial hall and the vestibule have been preserved as top original interior. [9]

It is high time that the protection of these unique works of modern architecture be taken care of, so as to prevent the scenario where only the fragments are left to preserve and where they eventually end up in the dusty storage rooms of the Museum of Design right next to the unfortunately dismantled Government Lounge removed from the airport, the penultimate work of Vojtech Vilhan.

THE HERITAGE

The case study of Jozef Chrobák

During data collection, we looked for a way of getting to the works of architect Jozef Chrobák, who worked under the auspices of Professor Lacko in Zvolen and Banská Bystrica. His most significant works definitely include the Culture House in Banská Bystrica (1988), the interior of which is a result of his cooperation with architects Juraj Štecko, Stephen Mikuška, Igor and Boris Gerdenich Džadoň.

In 1998, the team from the Institute of Interior and Exhibition Design of the Faculty of Architecture and Design STU in Bratislava (Ivan Petelen, Peter Daniel and Michal Hronský) collaborated with Professor Jozef Chrobák on the design of the extension of the Congress Hall of the Regional Authority Office in Banská Bystrica, for which they eventually received the Architecture Award - CE.ZA.AR in the same year. From 2001 to 2006, a member of the research team Dušan Kočlík completed his studies, partly under the guidance of Professor Chrobák, and therefore the obtaining of this information even had a rather personal dimension.

After the death of professor Chrobak (2015), his son was approached with a request for permission to search his father's photographic archive and to make it accessible. The son responded with a photo of a collection of works from various exhibitions, which were stored in the cellar at that time. Subsequently, talks began on the possible archiving and safe placement or storage of the estate. As the Faculty of Architecture and Design STU in Bratislava does not have archive facilities, the Slovak National Gallery and the Collection of Architecture and Design unit, represented by curator Denis Haberland, was contacted via the researchers and they confirmed that the Slovak National Gallery was interested in the architect's estate. (The transfer of the archive from Zvolen to the gallery is currently postponed, as pandemic-related restrictions currently complicate any further action).

UNCULTURED

The case study of the Culture House Ružinov

The distinct and rather difficult to grasp architectural work of the Culture House Ružinov by architects Mikuláš Breza and Marián Maľovaný (1982) contains a relatively well-preserved form of an interior idea. At present, this building is "devalued" by deposits resulting from a number of different construction modifications which took place due to the expansion of businesses in the

interior. As it has happened in many other such cases, the original idea of decent architecture intended for cultural services to the general population has disappeared there, and combined with the neglected outdoor area surrounding it, it is an unattractive place, currently serving as a local pub for the housing estate. On various occasions, it is still able to serve its original purpose, but it is unlikely to host any pompous red carpet event.

Paradoxically, a part of the period interior decorations has remained intact and the foyer with its expressive chandelier produced by the Arts and Crafts Workshop and designed by Otto

Berger and the skylights can still take your breath away. The construction space of the foyer practically has not been changed at in the past almost 40 years of its existence and minor modifications were only done during the reconstruction in 2016. [10] However, the modifications are not so fundamental that they would be irreversible. This work was selected as a representative example of the phenomenon observed in many other buildings, to varying degrees. In addition to the impressive chandelier, the foyer was also decorated with a monumental painting by academic painter Štefan Bobota, as shown in the photo. [11]



Figure 3: Foyer of the Culture House Ružinov, before and after the reconstruction.
Source: insk.eu. Photos: Ivan Lužák (original), Simona Strihovská (current state)

Despite its monumental dimensions, this painting is not visible these days. According to our findings, the work is still in place, hidden under a suspended plasterboard wall. Based on the available information, the partition was made so as not to damage the painting, and although we cannot check its condition, it can be assumed that the painting is protected and preserved for the future. It is embarrassing that this work of art was covered only because they needed an empty wall on which occasional exhibitions could be installed, often of amateur level quality, and it is tragicomic when a cultural institution does not know how to take care of a work of art and chooses to cover it. Nevertheless, this case can still be described as a positive example, as there have been a number of other examples that received publicity where works of art were destroyed. Therefore, it is important to emphasize this problem in connection with the research of interior design.

FORGOTTEN

The case study of Gabriela Cimmermannová

While working on the research and collecting data on the works of art, a recurring phenomenon of female co-authors not being mentioned was discovered. This has somewhat improved, although it still persists, especially in case of important works. In the new television series on architecture from 2020 called Icons, in the part on Dušan Kuzma in the story on the new Matica Slovenská building in Martin, architect Gabriela Cimmermannová [12] was not mentioned alongside Anton Cim-

memann, co-author of the architecture design and Vojtech Vilhan, co-creator of the original interiors, even though her interior designs are very expressive and of high quality, and together with Vojtech Vilhan she ranks among the top interior architects of the past decades. Similarly, the designer Júlia Kunovská and her involvement in the interiors of the House of Art in Piešťany by Ferdinand Milučký (1980) or Marta Skočková and her share in the designs of interiors of the Slovak Radio building or the Istropolis building in Bratislava are often forgotten. [13]

Relatively little information has been preserved about architect Gabriela Cimmermannová, and her important works have been gradually disappearing. The aforementioned building of Matica Slovenská has been preserved in excellent condition. This is probably due to the fact that it is under state administration and the state tends to use any resources on the equipment of its buildings rather sparingly. So, with some irony, it can be said this is "fortunate". However, this fact must be highlighted, because thanks to this phenomenon, many interesting works of interior design owned by the state have been preserved in an almost intact state.

During the field research, we managed to check the status of another work, the Slovakia Hotel in Žilina, which is the outcome of the collaboration of Cimmermannová with architects Severín Ďuriš, Otto Sedlák and Stanislav Toman. At that time, it was a progressive interior solution, mainly because the authors promoted the use of a foreign suspended ceiling system, which

gave the space a futuristic look. Other atypical interior elements complemented this innovation in an equally unique way.

These days, the interior has partially been preserved, however, inappropriate, cheap and unprofessional modifications have been so aggressive that any recovery or restoration is almost impossible. Only fragments can be recognized there, which, although damaged, have their own expression and still can amaze their audience, even with the passage of time. Apart from the absurd new coating, the ceiling has remained almost intact, but the other spatial elements seem disproportionate or even inappropriate.

Many successful women architects were presented by the exhibition *"They are everywhere! Women in Slovak architecture of the 20th century"* prepared by curator Henrieta Moravčíková in 2019. It was installed in the foyer of Faculty of Architecture and Design STU in Bratislava and aimed to commemorate the intense and at the same time still rather unknown and neglected work of women in Slovak architecture of the 20th century. [14]



Figure 4: Interior of the Slovakia Hotel in Žilina (1981).
Photo: Tibor Škandík



Figure 5: The current state (2018) of the interior of the Hotel Slovakia in Žilina.
Photo: Katarína Ružinská

REBIRTH

The case study virtual recovery

From the very beginning, there was an ambition to virtually model the iconic interiors of previous decades that no longer exist or have been destroyed. A similar research task of colleagues Vladimír Hain and Michal Ganobiak was also an inspiration. *"The potential of virtual and augmented reality was identified and verified by researchers in the presentation of a defunct monument building, specifically an industrial heritage."* [15]

The research task created an opportunity at our Institute to supplement the study course Contexts of Interior Design with a scientific dimension, which also made it possible to involve students as well. The aim was to master the basic methodology and, at the same time, to develop an assignment that could later be used in a research task. Naturally, the involvement of second-level students had its limitations, the first semester was used to test the possibilities, scope and accuracy that were

achievable. The reliability of these students has been verified especially during their participation in field research. During the collection of basic data, several interesting interiors located in various parts of Slovakia were selected. It was necessary to check the background of these works. Several works were visited and documented in person. Field research was a very important part of the survey and it was also time-consuming and demanding organization-wise. The involvement of students significantly helped with that, despite the high degree of inaccuracy which means that the obtained theoretical data had to be checked before publication.

Students were given the task of selecting a work from a database that is located near their place of their residence. They were supposed to visit and document the interior, make contacts and prepare a report on this work. This assignment was given repeatedly during two semesters and thanks to the involvement of students, a relatively large part of the territory of Slovakia was covered. Up-to-date data on about 45 works were obtained. Of these, those that were field-verified were subsequently selected. Thanks to the students' work, information on

the current state of the works was available, and based on this data, works were selected that should be further documented.

A new possible branch of the research tree was launched during two conferences - Identity SK and Interior in Slovakia in October 2018, when we started closer collaboration with architect and associate professor Branislav Somora, whose lifelong work is extensive and covers a truly broad-spectrum.

As a student and collaborator of Professor Lacko, Branislav Somora has worked not only on architecture but also on truly original interiors. Many of them became icons of their era, such as the Junior Hotel CKM (1982) or the cafés on SNP Square in Bratislava (1976) and the Culture House in Spišská Nová Ves (1983). The architect himself provided us with an overview of his work, as well as visual documentation and part of the drawing documentation. [16] An experiment was carried out beyond the scope of the research and one of the "lost" works was virtually processed. The choice fell on the expressive interior of the underground bar in the Družba Hotel in Michalovce (1981) produced by the author team of Ivan Slameň and Branislav Somora.



Figure 6: Interior of the underground bar in the Družba Hotel in Michalovce (1981).
Photo: Archive of Branislav Somora

What is curious about this inserted interior is the fact that it was designed and installed in Michalovce and produced for a specific place with red colour version and later it was copied and adapted in Humenné (a purple version). The authors were informed about the whole situation, but they allegedly never saw this second version in person or were invited to participate in the implementation. Thanks to the author's archive, three photographs of the interior and a detail of an atypical lamp were preserved, which could be used for picturing the axonometry of the entire interior, which was essential for the experiment. These were the only available input data to test the creation of a digital model. By measuring the seating furniture in the axonometric view, the information for the calculation of the scale was obtained and subsequently it was possible to calculate the dimensions of the whole space. As part of his work, PhD student Adam Tóth created a 3D model and textured as faithfully as possible using photographs of the interior space. Rendering helped to create 360° views and a background that was published on the website www.insk.eu, where it is possible to make

a virtual tour of the already non-existent interior. The method was called "virtual renewal"; similar projects have appeared around the world, for example, under the name "digital reconstruction." [17] The method of virtual renewal was further developed during the last pandemic semesters and students were again involved in the work. The methodology was similar to the one that proved to be successful for the first time. Due to the distance-learning process, students selected works not far from their location and if the situation allowed it, they checked their current state. For this case, team work was chosen and the results of the efforts were work reports and six new virtual tours. [18]



Figure 7: Virtual renewal of lost work.
Render: Adam Tóth

Personal contacts with the authors, architects Peter Brtko and Katarína Okálová were especially helpful with respect to the personal development of students and also the data collection.

CONCLUSION

A house without a functional interior is not a real house. However, interiors are often temporary, with fleeting and relatively short lives. Many past and often non-existent interiors should not be forgotten. It is because even in relatively recent times and difficult to understand conditions of current time works of indisputable architectural and artistic qualities have been created. The ambition is to bring these works back to life in various ways.

Research focused on the public interiors of well-known or even less known buildings by Slovak architects from various parts of Slovakia. It presents the work and creativity of interior architects, especially from the times of socialism era. It is like time travel. The research points out that the interior design realizations were with their quality, despite the limitations that existed at the time of their creation. The result, as it is today, was often short-lived, so the research offers options for how to preserve some works in the form of preserved photographs, drawings, occasional exhibitions or in the form of virtually recreated interiors. [19]

REFERENCES:

- [1] Petelen, I., Daniel, P., Havaš, P., Hronský, M., Janáková, O., Lichardová, V., Materáková, E., Morávková, K., Vinárčiková, J. (2004) "Interiér". Vydavateľstvo TU, Zvolen, Slovak Republic, pp. 9.
- [2] Daniel, P., Hronský, M., Husárová, S., Jelenčík, B., Kočík, D., Kotradyová, V., Kučerová, M., Morávková, K., Petelen, I.,

- Salcer, I., Urandová, A., Vinárčiková, J. (2017) "Interiérový dizajn". Vydavateľstvo SPEKTRUM STU, Bratislava, Slovak Republic, pp. 12.
- [3] Brooker, G., Stone, S. (2011) "Co je interiérový design". Slovart CZ, Praha, Czech Republic, pp. 256.
- [4] Daniel, P., Hronský, M., Husárová, S., Jelenčík, B., Kočlík, D., Kotradyová, V., Kučerová, M., Morávková, K., Petelen, I., Salcer, I., Urandová, A., Vinárčiková, J. (2017) "Interiérový dizajn". Vydavateľstvo SPEKTRUM STU, Bratislava, Slovak Republic, pp. 14.
- [5] Daniel, P., Hronský, M., Husárová, S., Jelenčík, B., Kočlík, D., Kotradyová, V., Kučerová, M., Morávková, K., Petelen, I., Salcer, I., Urandová, A., Vinárčiková, J. (2017) "Interiérový dizajn". Vydavateľstvo SPEKTRUM STU, Bratislava, Slovak Republic, pp. 17.
- [6] Daniel, P., Hronský, M., Husárová, S., Jelenčík, B., Kočlík, D., Kotradyová, V., Kučerová, M., Morávková, K., Petelen, I., Salcer, I., Urandová, A., Vinárčiková, J. (2017) "Interiérový dizajn". Vydavateľstvo SPEKTRUM STU, Bratislava, Slovak Republic, pp. 15 - 18.
- [7] Bahna, J., Mikloš, P., Galéria architektúry SAS. (2006) "Architekt Vojtech Vilhan". Vydavateľstvo Spolku architektov, Bratislava, Slovak Republic, pp. 76.
- [8] Bahna, J. (2014) "Tak bežal čas 1944 – 2014". Vydavateľstvo Spolku architektov, Bratislava, Slovak Republic, pp. 153.
- [9] Zervan, M., Bahna, J., Petelen, I. (2011). "Architekt Rastislav Janák". Vydavateľstvo Spolku architektov, Bratislava, Slovak Republic. pp. 59.
- [10] "Ružinovské Echo". [online] Available at: [web address/https://www.ruzinovskeecho.sk](https://www.ruzinovskeecho.sk) [Accessed: 24 April 2021]
- [11] Pokorný, V. (1985) "Kultúrne zariadenia na Slovensku". Obzor, Bratislava, Slovak Republic, unpaget.
- [12] "Register of modern architecture oA HÚ SAV" [online] Available at: www.register-architektury.sk [Accessed: 24 April 2021]
- [13] "Register of modern architecture oA HÚ SAV" [online] Available at: www.register-architektury.sk [Accessed: 24 April 2021]
- [14] "Faculty of Architecture and Design STU in Bratislava" [online] Available at: www.fa.stuba.sk [Accessed: 24 April 2021]
- [15] Hain, V., Ganobiak, M. (2019) "Forgotten Industrial Heritage in Virtual Reality—Case Study: Old Power Plant in Piešťany, Slovakia", In *Presence: Teleoperators and Virtual Environments*. Vol. 26, Issue 4, pp. 355-365. https://doi.org/10.1162/PRES_a_00309 [DOI]
- [16] Somora, B. (2018) "Architektonická scéna na Slovensku v rokoch 1970 až 1989", In: Zborník medziodborovej dvojkonferencie Identita SK a INSK – Interiér na Slovensku. Bratislava, Slovak Republic. pp. 94 – 98.
- [17] "Interiér na Slovensku" [online] Available at: www.insk.eu [Accessed: 24 April 2021]
- [18] Spallone, R. (2019) "Reconstructive Architectural and Urban Digital Modelling", In: *Advanced Methodologies and Technologies in Government and Society*. pp. 1. 10.4018/978-1-5225-7661-7.ch046 [DOI]
- [19] "Archinfo" [online] Available at: www.archinfo.sk [Accessed: 24 April 2021]