

# THE INFLUENCE OF THE ARCHITECTURAL VALUE OF THE BUILDING ON ITS FUTURE LIFE

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**ABSTRACT:** The length of the building's life cycle largely depends on the possibilities of its usability. It is influenced by either the social need for the building and its economic profitability, or at least the ability to generate a significant part of the funds necessary for its operation. The optimal, or least sustainable use of a building can be hindered by a number of factors, including its architectural or even historical value, as well as the related construction and technical design. Extensive research into the use of real estate in the Czech Republic has shown a very different approach to architecturally or historically significant buildings, covering a range from exemplary to frightening examples of the use of buildings in technical, social, cultural and economic contexts.

**KEYWORDS:** architecturally valuable building; protection of cultural heritage; structural engineering design of the building; sustainable use of the building; building management and maintenance; building life cycle

## INTRODUCTION

For its owner, a building usually represents a different degree and form of monetary and non-monetary benefit, but it is also an obligation associated with the fulfilment of responsibilities and often a cause of complications. Even the building of a private owner is not only part of the public space, in which it leaves an imprint for a long period of time, but often significantly affects life in the near as well as more distant surroundings. In addition, the building can be the bearer of added values of social significance that must be respected - usually these are historical, architectural, technical and other values.

The architectural value of each individual building can be perceived in terms of a number of parameters, few of which can be considered measurable. These are usually buildings of a specific architectural and technical solution, often with a worn-out structure which requires an individual approach and attention of all involved stakeholders in creating their new life, especially in the case of unused or even abandoned buildings. This approach must include both a sensitive search for a suitable new purpose for the building and a certain degree of tolerance of the parties involved so as to ensure a sustainable future for such a building (see Figure 1). An architecturally valuable building may or may not have the status of a cultural monument, i.e., be under the supervision of a state monument protection authority.



Fig. 1.: The building of the former rectory in Vratislavice nad Nisou, after extensive reconstruction and a modern extension, used as the federal IGI leisure centre with a library and reading room, a cinema hall and a lobby. (Source: authors)

## FACTORS AFFECTING THE USE OF ARCHITECTURALLY VALUABLE BUILDINGS

In the Czech Republic, two key laws deal with the man-

agement of buildings – the Building Act [1] and the Monuments Act [2]. The protection of the architectural values of buildings is ensured by spatial planning authorities and state heritage conservation authorities. According to §18, paragraph 4 of the Construction Act, spatial planning in public interest protects and develops the natural, cultural and civilizational values of the territory, including the urban, architectural and archaeological heritage [1]. When the plan for construction is assessed, a situation may arise where the plan is in accordance with the spatial planning documentation, but inconsistency with the architectural (and urban) values in the area, a positive binding opinion of the spatial planning authority cannot be issued. The bodies of state monument care are the Ministry of Culture of the Czech Republic, regional authorities and municipal authorities with extended powers. They carry out state monument care in the Czech Republic, i.e., in accordance with social needs, they ensure the preservation, protection, accessibility and appropriate social use of cultural monuments (such as historical buildings) [2].

The use and future of each building, regardless of its architectural value, is primarily influenced by its owner, in the case of discussion of building modifications or a change of purpose, the participants in the territorial and construction management are particularly influential. Each of the relevant parties has its own spectrum of requirements depending on its relationship to such a building, while the views of the various participants can often be at odds. The following examples can be documented as typical views and interests of individual participants in territorial and construction management in relation to an architecturally valuable building:

- The owner of the building primarily prefers the economic point of view. Then the building is a tool for his business and profit, or securing his needs (e.g., housing, personal representation), or legal obligations (concerns municipalities, regions, the state and their institutions). The so-called the enlightened owner also considers other values of the building (including architectural ones), which may not bring profit to him alone, but may be important for the society.
- The tenant of the building usually shows a similar economic, personal or legal interest as the owner of the building, but usually without sentiment towards the very essence of the building and its non-monetary values. However, they can accept the use of an architecturally valuable building as part of their prestige. The tenants are usually not a participant in zoning or construction proceedings; their behaviour towards the building, especially if it exhibits cultural values, is supervised and directed by the owner of the building.

- On one hand the owner of the neighbouring property typically takes the approach of "having peace and a nice view", i.e. He demands that the neighbouring building be maintained not only for visual reasons, but also, for example, so that non-adaptable people do not move into it. At the same time, if possible, the building is used in such a way that it was not disturbed by noise, traffic, etc. The intolerant approach of a neighbour can significantly limit the possibilities of using the building but his requirements may not be taken into account in the proceedings. On the other hand, the existence of an architecturally valuable building usually increases the value of buildings in its vicinity.

- The municipality (but similarly also the region or the state) through its representatives usually monitors the interests of its citizens so that the building in question ideally serves their needs through its use. In this context, the municipality acts on two levels – in relation to the buildings in its ownership, and in relation to the buildings of other owners on its cadastre. Ideally, buildings owned by other owners should complement the portfolio of purposes of municipal buildings, or at least participate in high-quality public space without negative impact on the citizens themselves (to a certain extent, a "neighbours" approach). If the municipality (region, state) is in the position of owner of the building, it is the duty of its representatives to manage this property with the care of a good manager, i.e., to use the property of the municipality efficiently and economically in accordance with its interests and tasks resulting from the scope defined by law, and at the same time to take care about its preservation and development.

- The state preservation authority is usually not interested in the efficiency of use and the economic profitability of the building's existence, as a rule it completely ignores the economic interests of the owner (including the municipality, region, state) or tenant, and primarily pursues the goals of preservation of the value of the building. The state preservation authority is characterized by high powers and can decide not only on the possibility or impossibility of ensuring the sustainable future of the building, but also often on the quality of life of citizens in the vicinity of such a building and the public space around it, in both a positive and negative way.

- Various personal interest and pressure subjects with their interests are largely unknown in the process of deciding on the future of an architecturally valuable building, they can have both positive and negative motivations. The process of using and trying to save such a building and its future can in many cases be very complicated.

Compared to zoning and building regulations for building modifications or changing the purpose of an ordinary building, the owner and builder of an architecturally valuable building is faced with requirements that significantly limit his intention with the building in addition to ordinary regulations. Restrictive regulations mean a significant increase in the price of the entire project, or its impossibility of realization - either due to the unbearable amount of investment costs, or the amount of operating costs, against which the use of the building will not generate sufficient profit. If the owner, who is not economically strong enough (in addition to a private owner, it can also be a municipality or a church), it is impossible to carry out construction modifications to the building to reduce its uneconomical value, or even in combination with changing the purpose of the building so that it is at least economically self-sufficient, or more profitable, he may withdraw from his intention. A worse option is that they start the implementation in accordance with the requirements, but in the course of it they run out of funds and the building stays under construction, often unsecured, exposed to the environment and quickly degrading. Finding a universally suitable solution for

the building's new life is not always easy, but all the more satisfying (see Fig. 2).



Fig. 2.: The castle and court in Zruč nad Sázavou is characterized by multi-functional use, combining both ensuring the fulfilment of legal obligations of the municipality and social needs, and commercial use generating funds for operation. The extensive castle complex with a park and courtyard includes the seat of the municipal office, an information centre, 3 museum exhibits, sales of building materials, a veterinary surgery, a cafe, a bar and a public toilet, all with respect for the values of the buildings and their surroundings. (Source: authors)

## ARCHITECTURAL VALUE OF THE BUILDING AND PRINCIPLES OF ITS PROTECTION

The architectural value of buildings is a term which is not a clearly defined in the Czech environment. On the basis analysis of legal and professional documents, it can be stated that the architectural value of a building is characterized by its own architectural quality (aesthetic and technical solution), social significance, level of preservation and authenticity of historical constructions, layout and outer shell, or at least some of these attributes. The measure of architectural value cannot be only the appearance of the building, such an approach would leave behind a huge group of modern, industrial and technical buildings in general, as well as other type of buildings. Architecturally, buildings can be valuable not only in their original layout (stylistically pure), but also buildings that have undergone several reconstructions and building modifications, after which they are characterized by a valuable individual design (see Fig. 3). Modern buildings (constructed in the last 50 years or so - so-called architecturally valuable new buildings - see Fig. 4) can also be architecturally valuable, but they cannot be historically valued. However, they can show the potential of possible historical (historical) value for the future.

The meaning of the term architectural value of a building is broader than the term heritage protection of a



Fig. 3.: The lock of the lock chambre with the Hořín bridge and hydroelectric power plant, part of the Vraňansko – Hořín navigation canal cultural monument. The profile of the lock chamber no longer fits the dimensions of contemporary ship assemblies. The preservation of the structure was achieved by technically demanding widening of the bridge span by 1 m and increasing the underpass height by building a unique hydraulic system to raise one of the spans of the historic bridge by 5 m. (Source: authors)





Fig. 4.: The utilitarian building of Pavilion Z at the České Budějovice Exhibition Center underwent a renovation that removed the limitations and single-purpose use of it, and achieved maximum flexibility guaranteeing its high commercial potential and thus the economic sustainability of further operation. While respecting its original material solution and layout of the exhibition area, the building was visually lightened inside and out. (Source: authors)

building. The building's historic value is based on its preserved historical foundation. It is not related to its structural and technical condition (ruins are often protected as monuments - the torso of historical buildings, see Fig. 5), but also to potential legal protection under the Monuments Act - many valuable buildings do not yet have the status of a cultural monument. Cultural monuments in the case of buildings are architectural monuments characterized by a valuable architectural solution or used procedure, or immovable technical monuments, documenting the development of science, production and technology in a certain area. These monuments are important documents of the historical development, lifestyle and environment of society from the earliest times to the present, as manifestations of the creative abilities and work of man, for their revolutionary, historical, artistic, scientific and technical values [2]. Monument care is characterized by several levels of protection, or by types of monuments.

The purpose of heritage protection is to protect the



Fig. 5.: The listed ruins of Helfštýn Castle have undergone modern construction interventions that have sparked controversy and extensive debate. The static securing, safe access to the building and its partial roofing with structures made of weathering steel, concrete and glass is extremely unique and at the same time respects the torsional character of the building. In addition to the visual effect, the process of destruction of historical structures was stopped and their further life extended by several generations. (Source: authors)

attributes of architecturally or even historically valuable buildings, and to prevent them from deterioration or even extinction. The approach of the state conservation authorities is aimed at preserving historic values, i.e., architectural values, both in the exterior and interior. This entails the tendency to prevent unwanted changes to the appearance of the building (facade, roof, including the installation of PV panels), disruption of mass and scale (extensions, superstructures, conversion of gabled roofs to pseudo-mansards, etc.), removal of historical structures, etc. The building should not be rebuilt in a substantial way or even demolished. Only maintenance and repairs, restoration of defunct original elements are permitted, rehabilitation of the original layout, appearance (adjustment of potentially disturbing parts of facades, roofs, etc.), modernization of utilities and replacement of surviving elements with respect for classic technologies and

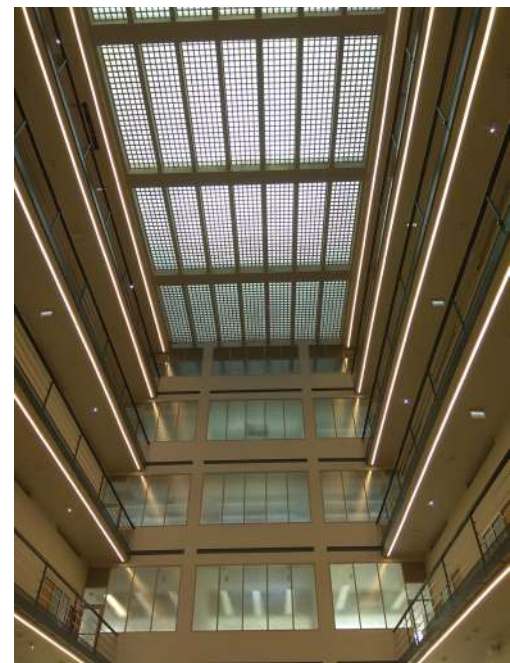


Fig. 6.: Exterior and interior of the functionalist former palace of the Electric Companies in Prague, transformed into a modern commercial administrative building with a multifunctional ground floor. Despite the modernity of the original design of the building from the 1930s, which allowed considerable preservation of its design (and therefore a by no means conflicting approach to historic preservation), huge costs had to be incurred to adapt the building to the needs of the 21st century, especially in the area of energy efficiency and technical devices. (Source: authors)

materials is supported [3]. This formulation of requirements essentially creates an artefact from the building, often with minimal possibilities of its involvement in the life of contemporary society.

From the point of view of society's relationship to the architectural and historical values of buildings (and their importance for society as bearers of evidence of its history, culture and technical sophistication), there is an obvious need to search for, protect and preserve these values. The question is to what extent (and in what cases) they should be superior to the factors that ensure these buildings at least some chance for the future, and whether this approach should be applied across the board. When looking for the use of a building and its adaptation to a new purpose, it is necessary to distinguish between a historical building such as a church, monastery or palace building, and an administrative building from the 1930s with built-in modern technologies, which can be more easily moved closer to the needs of contemporary society (see Fig. 6).

Efforts to protect the values of buildings often clash with the possibilities of saving buildings as a technical whole. Economic and social parameters, reflecting changes in social needs, technical development and the development of modern technologies, enter this process in a fundamental way. The reconstruction and maintenance of an architecturally valuable building according to the rules of historic preservation is very expensive, moreover, the building in its original form is very often difficult to use in the conditions of the needs of modern society. There is thus a conflict between the requirements of state institutions with jurisdiction in the field of historic preservation and relevant legislation, and the needs of the owner of the building. The ownership of cultural monuments in the Czech Republic is governed by generally binding legal regulations. The law [2] does not regulate the ownership of cultural monuments, nor does it specify that certain categories of monuments should be owned by the state. Only in relation to certain monuments, it lays down the rules for the state's pre-emption right. Although the law talks about the social importance and mission of cultural monuments, it does not directly order their owners to make them available to the public. From the point of view of the owner of an architecturally valuable building, the wording in the Charter [4] is still significant: Ownership binds. It must not be misused to the detriment of the rights of others or in conflict with general interests protected by law. Its performance must not harm human health, nature and the environment beyond the level set by law. The law [2] defines 2 basic obligations of the owner of a building that is a cultural monument, as follows:

1. The owner of a cultural monument is obliged at his own expense to take care of its preservation, keep it in good condition and protect it from danger, damage, deterioration or theft.
2. The owner is obliged to use the cultural monument only in a way that corresponds to its cultural and political significance, historical value and technical condition.

Regarding the owner, these are very demanding requirements, which are aimed not only at the preservation of historical structures and elements, the overall concept and appearance of the building, but also at the regulation of the way the building is used - that is, preventing damage to the monument at an intangible level. In real practice, there is thus the necessity to use very expensive procedures and materials in the reconstruction or renewal of such buildings, the impossibility of their expansion, and, on the contrary, a fundamental limitation in their use. The effort to preserve the historical building in the most authentic state can then lead to the fact that it will not only be unusable and, as a result, unrentable or unsaleable, but also its basic maintenance will not be financeable; in addition,

in many cases, the financing of extensive and sensitive restoration is beyond the means of the owner, despite the possible possibilities of subsidy support. Instead of a compromise when looking for ways to use the building for current needs, the state heritage protection authorities often prefer the process of its controlled deterioration in such a way that its age and the corresponding technical condition are evident [5] - see Fig. 7. It is questionable how far this approach is in accordance with the very concept of historical building protection.



Fig. 7.: Villa Lil in Mariánské Lázně from the beginning of the 20th century, a historical building. During its life it was used as a residential villa, spa hotel, administrative building, restaurant, casino, since the beginning of the 21st century it has been empty without use. Attempts at reconstruction or sale come up against the strict requirements of the state preservation authority to preserve the authenticity of the original solution. On the one hand, this enormously increases the price of the reconstruction itself by tens of millions of CZK, and on the other hand, it makes it impossible to modify the building for such a use that would at least finance the costs of its operation. Although the building is secured, it is attacked by moisture and wood rot and gradually deteriorates. The costs necessary for its preservation and further use increase significantly every year. (Source: authors)

On the other hand, the effort to find a compromise between the state heritage preservation authority and the owner of the building may result in allowing such construction interventions, which may even lead to modern modifications of some parts of the building or modern additions. The building is not only preserved, but also used appropriately and therefore maintained,



Fig. 8.: Administrative and development building of LASVIT Nový Bor. Two existing heritage-protected houses were renovated using traditional methods, and supplemented by two new ones, materially respectful of the surroundings, but completely modern and futuristic in terms of material and shape. Their surfaces are translucent glass templates in one case, and black cement templates in the other. (Source: authors)



with a view to the long-term future (see Fig. 8 and others). This approach should be a matter of course on the part of the state heritage preservation authorities in cases where the building is no longer sustainable in its original technical solution for objective reasons, and it is not a building of unique importance.

## PROPERTIES OF ARCHITECTURALLY VALUABLE BUILDINGS VS. NEEDS OF MODERN SOCIETY

Each building was built or modified in its time for a purpose that was in demand at that time and place, or at least the appearance of this demand was created. For this purpose, the building was designed and executed with a certain degree of success, using modern materials, technology and knowledge. Some of these buildings are today considered architecturally valuable, and in the case of monuments, other values are also added. Despite the respect that an expert and perceptive observer has for these buildings, it must be stated that, from today's point of view, these buildings show a huge number of defects, even in cases where it is possible to use them for their original purpose. The most significant types of defects include:

- unsatisfactory rigid layout arrangement, due to the considerable mass of the vertical supporting structures and the material-technical solution of the ceilings, the layout is practically unchangeable without drastic interventions in the structural system;
- from the point of view of the requirements of the current regulations, the undersizing of some load-bearing structures serving either the original purpose, or in the case of a required increase in load related to partial changes in the purpose of some rooms;
- unsatisfactory hygienic conditions in the interior, such as insufficient capacity of social facilities, parameters of daylighting, ventilation, etc.;
- high energy demand, when the impossibility of reducing heat losses due to the inviolability of the outer surface of the perimeter walls (internal insulation is technical nonsense) and at the same time the usual impossibility of installing energy sources such as solar systems or heat pumps due to the inadmissibility of interfering with the design of the building or spatial constraints;
- high operational complexity in terms of administration, starting with the complexity of cleaning (a large number of small windows and rooms, difficult-to-access places, valuable and at the same time sensitive surfaces, etc.), through security to the frequency and technical complexity of maintenance or repair operations;
- the absence of the necessary infrastructure, especially insufficient capacity connection, parking or modern communication technology.

Over the centuries, society has undergone changes in almost all areas of life, and the dynamics of these changes have been extraordinary in recent decades. This is reflected in the reduction or complete disappearance of the need for certain types of buildings or their purpose (residential or administrative palatial buildings, village elementary schools, city barracks, industrial sites and train stations in city centres, water towers, electricity transformers, etc.) and, conversely, the emergence of new building purposes. In light of these changes, there is either pressure to convert unused traditional buildings for new needs, or to abandon a significant number of such buildings. This process entails a significant risk of irreversible damage to architecturally valuable buildings, or even their destruction. Currently, there are several thousand unused buildings or areas of the brownfield in the Czech Republic, which degrade their surroundings, contribute to the creation of socially excluded locations and devalue neighbouring properties. A significant share of

this group is occupied by buildings and premises in the historic centres of cities, i.e., buildings of architectural value and often with heritage protection - see Fig. 9.



Fig. 9.: The area of the former spinning mill of F. A. Hiebsch, later Josef Schubert, with a core from the turn of the 19th and 20th centuries near the centre of Hrádek nad Nisou. Since 1999, individual buildings in the area have been either empty or inappropriately used as warehouses or car workshops; the already dilapidated site became the property of the city in 2015. There is no investment in the buildings, the poor technical condition requires unattainable investments in renovation, it is not possible to find a new way of use. (Source: authors)

In order for the building to survive into the future, it must meet the requirements of the applicable legislation. Among the most fundamental are the requirements of static reliability, fire safety, energy efficiency and others. At the same time, it is often necessary to repurpose it with sustainable features and management options. This needs to be predicted in the horizon of tens of years, which is why the multifunctional use of these buildings is often resorted to. Conversion is usually easier for buildings of smaller size, conveniently located and connected to the infrastructure - see Fig. 10 et seq.



Fig. 10.: The building of the multifunctional community center in Hrádek nad Nisou, created by the conversion of the villa of the manufacturer Josef Schubert near the premises of his former spinning mill (Fig. 9). The villa from 1924 has been a cultural monument since 2016 and is owned by the city. (Source: authors)

## PRINCIPLES OF SUSTAINABLE USE OF ARCHITECTURALLY VALUABLE BUILDINGS

When analysing the optimal use of real estate at a given time and place, it is the most significant (at the same time the most complicated) and the most limiting the technical side, the economical and legislative side directly related to it. Especially in the case of objects of the traditional building stock, their material, construction technical and layout solutions (contrary to the current typological requirements) provide very limited possibilities of adaptation for the needs of modern use with their current high energy demand, or operational demands in general. A specific group of buildings, forming a significant part of the cultural heritage, are sacral buildings, represented mainly by churches and monastery complexes. These buildings, with exceptions, serve and will always serve their original purpose without major modifications (see Fig. 11). Despite all the negatives of their construction and technical solution, which from the point of view of today's requirements contains a number of defects,

they are completely satisfactory for the given purpose. These buildings document the historical development of architecture and construction and have had the same owner for centuries, who today is relatively financially secure. Rather, his goal is to involve these buildings more in the life of modern society, so that even with these buildings, their primary purpose is expanded to include additional uses, whether it is social events, exhibitions, etc. (see Fig. 11).



Fig. 11.: Interior of the Church of the Assumption of the Virgin Mary in Plasy, part of the national cultural monument of the monastery in Plasy. The church, in a state of disrepair, underwent extensive revitalization, including, among other things, the expansion of the sightseeing route for the public, the installation of an exhibition about the history of the place, and adjustments for the organization of cultural events. In essence, this is a multifunctional building with a significant expansion of the original use. (Source: authors)

The optimal use of real estate does not always have to coincide with the so-called ideal use, even according to the ideas of its owner. Some of the limiting parameters of architecturally significant buildings can prevent the realization of these ideas - even with a satisfactory technical, financial and well-founded overall solution, the plans can be hindered by the requirements of the historic preservation authority. The discrepancy between the ideal and optimal use of the property leads to the determination of 5 categories of its use according to the assessment of the level of optimization of the given building, for consideration of its further future [5]; with the inclusion of the aspect of protection of its architectural value, these categories can be modified as follows:

1. The existing use of the building is optimal, or even at the level of ideal use. The building currently shows maximum use even while respecting the requirements of the state monument preservation authority. Nothing fundamental can be done to improve its use.
2. Very good use of the building. The building may not show optimal use (but its use is close to this state), but it provides the owner with reasonable benefits. Depending on the possibilities, a sensitive reconstruction or expansion of the building to further improve its use is also permissible.
3. Improper use / overuse of the building. The building in its current form violates zoning, historic or construction technical requirements. It is essential that, in the near term, large-scale investments in the building take place and such adjustments are made that it complies with legislative regulations and its historic value. Overuse can also be associated with partial use of the

building (a certain part is completely unused, or the use capacity is very low considering the costs). The economic benefit of abandoning (not using) the building cannot be clearly evaluated.

4. The building is not and will not be used appropriately. The overall circumstances do not allow the building in its current state to be brought closer to optimal use by adequate technical measures and/or financial costs. With regard to its architectural value, fundamental construction modifications are not acceptable, it is more economically advantageous for the owner to abandon the building. In exceptional cases, the building will be sold to a financially secure and philanthropically oriented investor, who will subsequently provide investments in the reconstruction and rescue of the building, despite the impossibility of achieving a return on the invested funds. The reason may be the owner's sentimental relationship to such a building, or the prestige that such a building provides to the owner.

5. The building is not and will not be used not only optimally (rather not used at all), there has been a cumulation of all limiting factors - the building is architecturally very valuable or even protected as a historical building, the requirements of the monument protection authority are so strict that they make it impossible to adapt it for the needs of any effective contemporary use. Perhaps also as a result of this claim, the building is in neglected or poor technical condition, there is no demand for its use for any purpose for which it is structurally suitable, the financial demands for its maintenance or conservation in its current state are unbearable. Such a building is therefore not only unusable for any needs, but also unsaleable, it is doomed to gradual extinction. It must be stated that the obstinate attitude of the heritage preservation authorities is by no means exceptional (although it cannot even be called the rule), and there are at least dozens of valuable buildings in the described situation in the Czech Republic.

## PRINCIPLES OF SUSTAINABLE MANAGEMENT OF ARCHITECTURALLY VALUABLE BUILDINGS

The goal of the management of any real estate is to achieve the maximum benefit of the building itself and its investment plans, i.e., to make its operation financially optimal, efficient in terms of time, resources, material and personnel, and reasonable even with regard to the impact on the environment [6]. In common situations of a sustainable approach to building management, in the case of long-term financial losses, it is considered to sell, rent or change the way and level of use. The approach to the management of an architecturally valuable building cannot be conceived in this simple way. The high financial demand for building management and maintenance, in addition to the sub-optimal financial efficiency of the building, puts the facility manager in a difficult position. The latter must make a considerable effort to maximize the efficiency of management and maintenance, and minimize the financial costs needed for support services, even though the requirement in facility management constructed in this way does not bring optimal results. For this type of buildings, 3 basic concepts of approach to their management are distinguished, depending on the type of ownership [7], although their goals are the same:

1. Administration of buildings owned by the state, usually provided through the National Institute of Monuments. With regard to the extensive structure of interested entities in this area, excessively lengthy approval procedures occur, which have a direct impact on the effectiveness of the management of facility management activities.
2. Management of buildings in private ownership. The construction manager is usually directly subordinate

to the owner, or top management of the ownership entity. The management of facility management activities is thus usually very flexible and efficient.

3. Management of buildings owned by churches. Considering the prevailing nature of church buildings, their administration is usually entrusted to parish priests of individual territorial areas - parishes. In this area, the lack of sufficient professional competence to perform facility management can be a problem.

An architecturally and historically valuable building will always be more demanding to manage and maintain, even after a high-quality reconstruction and a high investment in the renovation, compared to an ordinary contemporary building of similar use. The financial and professional demands of managing and maintaining an architecturally valuable building are related to its irreplaceable value and historical significance, which "complicates" its daily care. An illustrative example of the specificity of the maintenance of an architecturally valuable building is a support service such as cleaning in a historical building of a château or castle (see Fig. 12 and 13). In addition to regular and sufficiently effective cleaning of social areas and areas with a high concentration of visitors, such as the cash desk or gift shop, it is necessary to approach various historical and valuable surfaces of the exhibition parts of the building with sensitivity. The performance of time- and financially efficient cleaning is made even more difficult by the irregularity of surfaces, their different surfaces and finishes, often a large number of small and irregular rooms and complex or poorly accessible cleaning facilities.



Fig. 12.: Vranov nad Dyji castle grounds, cultural monument. The vastness and fragmentation of the castle area clearly shows the demanding nature of its care. (Source: Construction of the Year)

Another specific discipline of management and maintenance of the castle object is the monitoring and precise balancing of the quality of the internal environment. When underestimating the balance of the quality of the indoor environment, such as humidity, temperature, CO<sub>2</sub> concentration, etc., the surfaces and structures themselves, as well as the exhibited artefacts, historical furniture and equipment, will gradually deteriorate. Cyclical bursts of visitors alternating with periods without visitors, or the organization of cultural or social events, create significant fluctuations in the quality of the indoor environment, which must be responded to promptly. Ensuring the safety of the building and its components is an obvious part of the management and maintenance of the castle. Not only in connection with the threat of fire, prevention of theft and deterioration of the building and its equipment, but also in connection with the safety of visitors, employees or event organizers. In connection with health and safety regulations, there are not exceptional structural non-standardizations, such as lowered ceilings and therefore insufficient underfloor heights, uneven or slippery floors, etc. All this complicates and increases the cost of the facility manager's work in ensuring and complying with safety rules.

From the above-mentioned brief example of the spe-



Fig. 13.: Interior of the castle Vranov nad Dyji. The variety, detail and artistic value of the surfaces requires a careful and professional approach to cleaning and maintenance, their protection against damage and safety in general, but also high-quality and stable parameters of the internal environment with a tendency to fluctuate according to the intensity of visitors and climatic conditions. (Source: authors)

cifics of administration and maintenance of one of the many types of architecturally valuable buildings, the high financial demands of caring for their smooth operation follow. To the costs of the described care of the building, the costs of care for visitors, administrative costs, etc. must also be added. Renting a part of an architecturally valuable and attractive building for social events brings a certain financial benefit to the budget of its administration, but the coverage of investment and operating costs coming only from the entrance fees or rental fees are very rare, usually only in a case of the most important monuments. A long-term rent of part of the building for one purpose is more economically efficient. In general, however, the mentioned type of buildings must be subsidized, which can be afforded by the state or cities. This is exceptionally the case with private owners, for example when it comes to a family residence or other building with an emotional bond. The specific and demanding environment of architecturally valuable buildings requires effective and at the same time sensitive management. Its performance must be ensured by a truly experienced and professionally competent provider of selected support services. Only awareness of the financial demands and at the same time the social value of an architecturally valuable building managed is a necessary part of its optimal, sensitive and sustainable future.

## CONCLUSION

The future of an architecturally valuable building is influenced by its location, architectural and technical solution and spatial possibilities, social value, owner's needs, requirements and interests of the state preservation authority, in the case of structural modifications to the building, and other participants in zoning and construction management. An essential parameter is the economic balance of its remaining life cycle, related to the usability and integration of the building into the public space and the life of the locality.

The preservation of an architecturally valuable building always requires an individual approach that respects the specifics of the given building and its surroundings, but also includes a wide group of technical, legislative (legal), economic, social and other param-



eters and requirements. Ownership of an architecturally valuable building is a big commitment for the owner, which the other interested parties should not make unbearably difficult for him. The most important external entity in this matter is the state monument preservation authority with its powers. It is indisputable that if the owner owns an architecturally valuable building, he can perceive this fact as a form of prestige, but at the same time he must be aware of certain limitations when dealing with it. On the other hand, even the state monument care authority should differentiate its approach and distinguish situations when it must maintain an uncompromising and prohibitive attitude, and when it should be a partner to the owner of the building, with whom it seeks ways for its future. As suitable contrasting cases, it is possible to cite a practically inviolable historical sacral building or complex, and a functionalist administrative building, where there is more room for pushing the boundaries. If both sides stand by their arguments and neither side wants to back down, the current owner will most likely stop believing in his intention, sell the building and it will continue to deteriorate, or he will not succeed in selling it, so it will deteriorate under his ownership. The result of the negotiations of both parties involved should be the use of each building in such a way that its future is at least economically sustainable, if not directly self-sufficient or even profitable, of course with maximum respect for its values. Such economic considerations include not only the costs of structural modifications of heritage-protected buildings, but also operating costs – in both cases relatively high costs. Then it is necessary to develop procedures for the management and maintenance of such valuable buildings, which will preserve their values and at the same time ensure their future. As the above examples show, such an approach is to the benefit of all parties involved, including the building itself, when agreement is reached.

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