PRESERVING THE VALUE OF ARCHITECTURAL HERITAGE IN CHIŞINĂU MUNICIPALITY

Svetlana ALBU

Technical University of Moldova, 41 Dacia Boulevard, bl.10, Chişinău, R. Moldova svetlana.albu@emi.utm.md

Ion ALBU

Technical University of Moldova 41 Dacia Boulevard, bl.10, Chişinău, R. Moldova ion.albu@fcgc.utm.md

Viorica URSU

Technical University of Moldova 41 Dacia Boulevard, bl.10, Chişinău, R. Moldova viorica.ursu@dp.utm.md

Doina-Cezara ALBU "Gheorghe Asachi" Technical University of Iași

1st Prof. Dimitrie Mangeron Bouvelard, Iași, Romania

Abstract: A considerable number of immovable properties with cultural/architectural value in Moldova is in private ownership. Their characteristics (usable area, service areas, requirements for facilities, the possibility of parking, etc.) do not correspond to modern preferences in the real estate market. The technical requirements imposed on this category of buildings (preservation of architectural appearance, the authenticity of materials, facade, and resistance structure, etc.) limit the possibilities of reconstruction and adjustment to the current requirements of society. However, their compact location (e.g., in the Historic Core of Chişinău) has generated in recent years an increase in value in the segment of residential real estate. The increase in the market value of rooms found in buildings with historical value (19th-early 20th century) compared to modern buildings (mid-late 20th century) is conditioned by the possibility of renting at reasonable price rooms found near the administrative centre of the municipality.

The analysis of international practices and local consumer preferences has highlighted the possibilities of adapting buildings of historical/architectural value to modern requirements. Apparently, the easiest way is to preserve the building in its current state and include it in the tourist routes. But this is not affordable for any of the buildings concerned and is not profitable for the owners. Another way includes rehabilitation of facades (as a rule with the financial involvement of municipalities), capital repairs on the interior at the owners' expense and inclusion in the economic circuit by short-term rental through various specialised networks. The third way involves making the buildings concerned an "exclusive" product on the property market.

However, the practical implementation of these possibilities in Moldova is limited by legislative and normative provisions, and by some regulations. In this study, the authors propose solutions for preserving the value of privately owned heritage found in Chişinău.

Keywords: Republic of Moldova, Chişinău, building, functional rehabilitation, transforming, utility, value.

INTRODUCTION

In the Republic of Moldova, the Register of Monuments protected by the state, according to the situation as of 13.01.2014,¹ includes 5.697 monuments, including 4.351 of national importance and 1.346 of local importance. Of all monuments, 47.2% are archaeological monuments and 52.8% are monuments of architecture, history, and art. The majority of the archaeological monuments (65.6%) are in the northern area and the majority of monuments of architecture, history, and art (46.8%) are found in the central area of the country (Table 1).

¹ Parliament of the Republic of Moldova 1993.

	Total	Including:		Including:	
Location		National importance	Local importance	Archaeology	Architecture / History / Art
CENTER Zone	2276 (39.95%)	2030	246	867 (32.2%)	1409 (46.8%)
Including municipality Chişinău	419	419	0	50 (5.8%)	369 (26.2%)
NORTH Zone	3005 (52.75%)	2034	971	1764 (65.6%)	1241 (41.3%)
SOUTH Zone	416 (7.30%)	287	129	59 (2.2%)	357 (11.9%)
TOTAL register	5697 (100%)	4351	1346	2690 (100%)	3007 (100%)

Table 1. The number of monuments included in the Register of State Protected Monuments on 13.01.2014 in the regional profile.

Source: author's elaboration based on (Parliament of the Republic of Moldova, 1993)

In the category "architectural monuments" are included 1.328 objectives of which more than half are religious buildings (churches, monasteries, cathedrals, synagogues) and about 38% are buildings for dwelling, social or industrial purposes (Table 2).

Table 2. The number of monuments protected by the State according to category and functional purpose.

Category	Value
Monuments of architecture, history, and art	3007
Including:	
Architectural monuments	1328 (100%)
Including:	
Religious buildings (churches, cathedrals, monasteries, synagogues)	759 <i>(57.1%)</i>
Residential, social, and industrial buildings	499 <i>(37.6%)</i>
Other types of architectural monuments	70 <i>(5.3%)</i>

Source: author's elaboration based on (Parliament of the Republic of Moldova, 1993)

As we can see in Table 1, the largest number of monuments of architecture, history and art are in the municipality of Chişinău. All of them are of national importance and represent 26.2% of the number of monuments found in the Central area of the Republic of Moldova. Adding to this the monuments of local importance (452 monuments, included in a separate register we get an impressive number of 821 monuments found compactly, of which more than half are for dwelling purposes.²

The problem of preserving the value of monuments is becoming increasingly acute given the legislative, economic, and social situation created in the Republic of Moldova.

THE PROBLEM OF PRESERVING THE VALUE OF BUILT MONUMENT'S IN THE CONDITIONS OF MOLDOVA

From a legislative point of view, the impediments to the preservation and enhancement of built monuments can be divided into impediments conditioned by the right of ownership and those conditioned by the regulatory framework of the field.

According to the Civil Code of the Republic of Moldova,³ current edition, "immovable property is considered to be the land registered in the register of immovable property under a separate cadastral number" (Article 459, paragraph 2), and buildings and underground constructions are part of the immovable property as "things and works permanently attached to the land" (Article 460, paragraph 1). This conceptual definition was adopted in 2019, the earlier version in the context of historical rigours allowed the situation whereby the ownership of land may belong to one person, and of buildings - to another natural or legal person, private or public in any combination.

In the case of historic monuments, this has become an obstacle to conservation action. As can be seen in Fig. 1, the surface of privately owned land and land in the private domain of the local public

² Chişinău Municipal Council 2014.

³ Parliament of the Republic of Moldova 2019.

administration - LPA (purple and yellow colour) represents half of the surface of the Historical Core of the town. Chişinău. As a rule, on the land in the private domain of the LPA, there are buildings that are on the private property of individuals and/or legal entities.



Fig. 1. Analysis of the built fund by type of land ownership in the Historical Core of the town Chişinău. Source: (Chişinău Proiect, 2022).

At the same time in the Chişinău, we find a large number of objectives without architectural value, built of earth or clay, without foundations, whose functional rehabilitation is problematic or impossible under modern conditions. For example, the monument found on St. Andrew Street, an individual dwelling house built in 1918 of mud, on one level, heated by a stove. To ensure its functionality, the building was converted (Fig. 2) without meeting the requirements of the monuments.



Fig. 2. Monument building found in Chişinău (front and courtyard view).

In Chişinău, we see a lack of strict rules about architectural requirements not only for built monuments but also for buildings found in protected areas. We can see blocks with 9-16 levels at the fence with the cultural monument, or multi-coloured facades (Fig. 3).



Fig. 3. Multi-coloured facades of buildings found in the protection zone.

So far, out of all the actions aimed at preserving the built historical monuments undertaken by the LPAs and CPAs (central public administration), only the prohibition actions have been successful. However, these actions only lead to an increase in the degree of the natural deterioration of the buildings and condition situations of non-involvement of the owners.

From an economic point of view, the obstacles to preserving the value of built monuments are conditioned by the rules of the market economy. Only what is useful and functional has economic value. If the building is functional, it has value and is useful to the owner. When interventions are necessary to ensure the functionality of the building and these interventions are prohibited or strictly regulated (which increases costs), the owner will look for the most profitable options for himself. From the practice of recent decades, the following decisions by private owners can be highlighted:

- The building is left to deteriorate and then permission is looked to rebuild, often demolishing the old building, and erecting a modern building with the façade elements retained;
- A reconstruction project is started, which supports the complete re-planning of the building and keeping only some elements of the old building (usually the façade).
- Capital repairs the building on its responsibility without applying for the necessary permits (violation of legislative and regulatory provisions).

These decisions are conditioned by the fact that land in the central area of Chişinău, depending on location, access, and area, in different periods of time reached 80-100 thousand euros for an area.⁴

From a social point of view, the obstacles to preserving the value of monuments in Chişinău are conditioned by social changes (taking over construction solutions practised in other countries and implementing them when returning to Moldova) and demographic changes (urbanization, orientation of the majority of the working population towards the capital) that change consumer preferences and to which construction companies react promptly (Figs. 4-7).

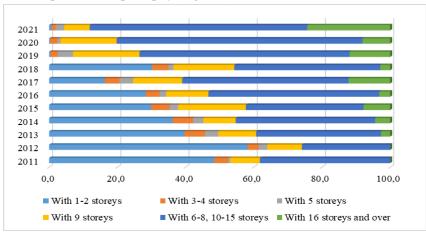
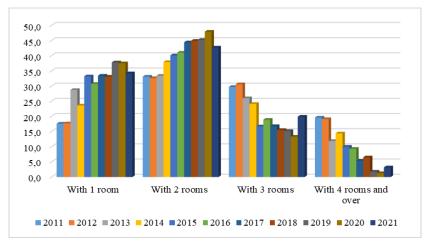
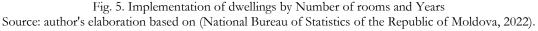
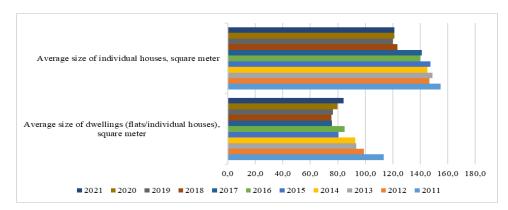


Fig. 4. Change in dwelling supply as a function of the number of storeys of the building. Source: author's elaboration based on (National Bureau of Statistics of the Republic of Moldova, 2022).

⁴ Albu 2020.







Source: author's elaboration based on (National Bureau of Statistics of the Republic of Moldova, 2022). 2011 2010 2009 2008 2007 2006 2005 2004 2003 2002 2001 0% 20% 40% 60% 80% 100% Bricks and stone Large-panels and frame-panels Large-block and prefabricated forms Other types

Fig. 6. Implementation of dwellings by average storeys area

Fig. 7. Change over time in preferences for wall material in dwellings put into service in Moldova. Source: author's elaboration based on (National Bureau of Statistics of the Republic of Moldova, 2022).

Current preferences for commercial properties (Fig. 8) include, but are not limited to:

- Preferably centrally found but with convenient access and potential parking;
- Modern architectural appearance and preferably "open space" division;
- Existence of energy-saving utilities (escalator, security, ventilation/conditioning, etc.);
- Ensuring natural lighting and maximum sunlight in rooms.

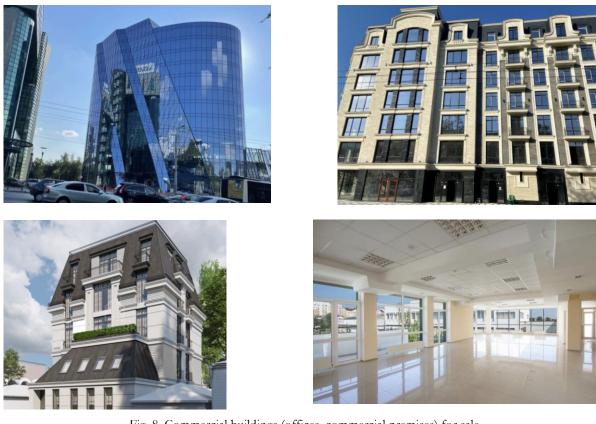


Fig. 8. Commercial buildings (offices, commercial premises) for sale.

The technical requirements imposed on historic buildings limit the possibilities of reconstruction and adjustment to the current requirements of the real estate market. It is problematic or impossible:

- Supply surface modulation; •
- Avoiding heat loss;
- Ensuring fire protection requirements; •
- Ensuring preferable natural lighting; •
- Ensuring the required number of parking spaces; •
- etc.



Alexandru cel Bun Street, 36. For rent Commercial 31 sq.m. at 8.7 euro/sq.m./month including VAT Office 17 sq.m. at 7 euro/month including VAT



Alexandru cel Bun Street, 49. For rent Office 20 sq.m. at 7.3 euro/sq.m./month including VAT



Vasile Alecsandri Street. For rent Office 211 sq.m. at 5 euro/sq.m./month including VAT

Fig. 9. Market display of built monuments in Chişinău for rent Source: author's elaboration based on (999.md, 1999-2023).

Preserving the Value of Architectural Heritage in Chişinău Municipality

The compact location of cultural monuments in the Historic Core of Chişinău has increased its market value.⁵ The increase in value for rooms found in buildings with historical value (19th-early 20th century) compared to relatively modern buildings (late 20th century) is conditioned by the possibility of renting reasonable price rooms found near the administrative centre of the municipality (Fig. 9).

WAYS TO PRESERVE THE BUILT HERITAGE IN THE CONDITIONS OF THE REPUBLIC OF MOLDOVA

Analysis of international practices concerning local consumer preferences has highlighted the possibilities of adjusting buildings of historical/architectural value to modern requirements.⁶

Apparently, the simplest way is to **preserve the building** in its current state and, following interventions such as restoration and rehabilitation of essential elements, to include it in the tourist routes. The increased number of tourists and hikers once again justifies this proposal. In 2022 the number of participants in tourism organised by travel agencies and tour operators increased by 48.7% compared to 2021.

According to the data of the National Bureau of Statistics of the Republic of Moldova the number of tourists and excursionists taking part in domestic tourism in 2022 amounted to 123.6 thousand visitors, increasing by 56.0% compared to 2021.7 Travel of Moldovan residents within the country for tourism purposes was organized by travel agencies and tour operators in the municipality of Chişinău (44.6%), development regions Centre (47.4%) and South (6.9%). In 2022, the number of foreign citizens visiting the Republic of Moldova through travel agencies increased by 20.8% compared to the previous year and amounted to 29.0 thousand tourists and excursionists, the majority (91.4%) being day visitors who arrived for rest, recreation, and leisure purposes.

However, this is not affordable for any of the built monuments and is not at all profitable for private owners.

Through conservation, we recommend the valorisation of the tourist potential of built monuments in the category of industrial buildings. Despite the small size of the Republic of Moldova, it has considerable potential for industrial cultural tourism, concentrated in large urban areas. The Register of State Protected Monuments of the Republic of Moldova holds sixty industrial monuments, including twenty-three mills (3 windmills, eleven watermills, and 9 steam mills).

Another way includes **the functional rehabilitation** of the building (through interventions such as maintenance and stabilisation work on the existing structure, the integrity of the materials used to make the building) and its inclusion in the economic circuit. This method applies to buildings that are in satisfactory physical condition. However, owners are faced with a lack of sufficient financial means and, as a rule, only conduct repair work using modern materials, which affects the cultural value of the building.

The most successful financial scheme in the context of a lack of resources for privately owned residential buildings is the rehabilitation of facades with the financial involvement of municipalities and the repair of the interior is conducted at the owners' expense.⁸ Subsequently, they are incorporated into the economic circuit by renting out as rental property - as a rule, on a short-term basis involving various specialised structures or networks (e.g., Booking), or by being converted into offices and proposed in the commercial property segment.

The third way involves **transforming** (through interventions such as rehabilitation, restoration and/or reconstruction works) the buildings concerned into an "exclusive", "interesting" and "sought-after" product on the property market. However, owners who take this route have not only faced financial problems but also procedural and regulatory problems at the pre-investment, design, and construction stages.

In the pre-investment phase, we note the lack of attention to the typology of cognitive approaches in the design process implemented in Moldova that the architectural heritage restoration sector has developed in European countries. Each method of investigation must be used according to the characteristics of the building and its

⁵ Albu 2020; 999.md, 1999-2023; Albu, Albu 2014.

⁶ Jitari 2022; Marian 2022; Lesan 2022; Bulat 2022.

⁷ National Bureau of Statistics of the Republic of Moldova 2023.

⁸ Albu, Albu 2021.

transformation requirements. The national legislation, among the documents needed as a minimum procedure of the preliminary phases of the project (technical expertise and design), is limited to listing works remarkably like those needed for the construction of new buildings and the repair of existing ones.

But more specific documentation needs to be supplied to understand the condition of the monument and the impact of the project from a conservation point of view. These additional documents become essential for the evaluation of restoration projects.⁹

Referring to the design phase, we will mention that the construction sector regularly introduces new or renewed concepts of technical normative documents, which respond to the needs of people's lives. New building regulations are designed by adaptation, for new buildings, although European legislation has progressively moved from the concept of "adaptation" to that of "improvement". However, so far, the Republic of Moldova has no national normative documents regulating methods of investigation and intervention, using materials and techniques in the conservation and restoration works of architectural heritage. Although twelve indicators of estimate norms, which are related to the calculation of restoration works on cultural heritage objects, have been developed in the period 2012-2018, they do not cover the needs of the field.¹⁰

The transformation of the historic building must be assessed in terms of the need for protection or the ability to respect cultural features, which have been derived from the cognitive process. Transformation is usually related to the need to introduce proper performance contained in building standards.¹¹

At the execution stage, we note that in the Republic of Moldova, construction companies are faced with a lack of craftsmen, and professionals specialized in restoration works.

The Ministry of Culture in order to guide the owners of historic buildings, specialists and decision-makers in the choice of solutions and ways of correct conservation approved in 2021 a primary information tool "Guide for interventions on historic buildings in Chişinău".¹² And in 2022 approved the methodology for the elaboration of an instrument considered essential for the formation of effective local policies and strategies in the field of sustainable management/development of historic places, namely *the historical-architectural reference plan and the project of protection zones of historic places.*¹³

CONCLUSIONS AND PROPOSALS

Generalizing the above, we consider it necessary to involve to a greater extent the institutions in charge of preserving the architectural heritage of the Chisinau municipality. The current restrictive measures do not allow the development of the city, but neither do they allow the preservation of historical monuments in a functional state without affecting their cultural value (in particular, we refer to privately owned monuments).

The issue of separate ownership of the components of the immovable property (land and buildings) could be resolved if permission to privatise the land were to be made conditional only after the rehabilitation of the privately owned building.

By conservation we recommend, in the conditions of the Republic of Moldova, exploiting the tourist potential of monuments built in the category of industrial buildings.

To valorise the historical cultural heritage through transformation, it is necessary to improve the legislative and regulatory framework of Moldova following the requirements of European standards. Thus, for example, in the context of interventions on masonry buildings, the provisions of the Eurocodes on the design of masonry structures¹⁴ and structures for earthquake resistance should be used.¹⁵

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⁹ Ministry of Infrastructure and Regional Development of the Republic of Moldova 2018.

¹⁰ Croitoru 2021.

¹¹ Standards Institute of Moldova 2021; Standards Institute of Moldova 2020.

¹² Evremov 2021.

¹³ Ministry of Culture 2022.

¹⁴ Standards Institute of Moldova 2022.

¹⁵ Standards Institute of Moldova 2019.

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The historical-architectural reference plan is an especially useful and valuable tool for the preservation of the built heritage, but in the conditions of the Republic of Moldova it will lead to the postponement and in some cases to the impossibility of the development of localities. The elaboration of the historical-architectural reference plan requires a considerable amount of time and funding. Given the fact that funding is to be provided from local public administration sources, it is obvious that the drafting of this document will be delayed indefinitely. The only way to draw up these reference plans at the local level is to attract international funding in the form of projects /grants / non-reimbursable loans.

This plan could become a benchmark for reviewing the registers of national and local heritage found in Chişinău in order to examine the buildings not only according to their historical and cultural value but also according to their current technical condition and functional potential.

The grouping of the buildings, based on the results of the technical expertise, into buildings to be preserved, to be rehabilitated or converted, to be demolished and replaced with a modern replica preserving the architectural style and the application of the commemorative plaque, would allow the development of the town to be boosted without affecting its historical value.

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REFERENCES

Albu, S. 2020, Architectural heritage issues in the Republic of Moldova, in: Architectural heritage: legal, technical, and economic aspects, Chişinău, 271-289.

Albu, S., Albu, I. 2014, Real estate market: scientific-methodical work on the analysis of the real estate market, Chişinău.

Albu, S., Albu, I. 2021, Bucharest's experience with the rehabilitation of historic buildings, in: Architectural Heritage: technical, economic and legal aspects, Chişinău, 40-55.

Bulat, I. 2022, Management of residential real estate and historical/architectural value, in: Modern approaches to property rights, Chișinău, 125-129.

Chişinău Municipal Council 2014, Register of Historical Monuments of Local Category from Chişinău Municipality, https://www.Chişinău.md/files/anul_2014/registru_monumente/monumente_locale/Registru_Anexa_1. pdf (accessed 2023).

Chișinău Proiect 2022, Chișinău Project: platform with Local Level Geographic System, https://gis-Chișinău proiect.hub.arcgis.com/ (accessed 2023).

Croitoru, G. 2021, Analysis of the legislative and regulatory framework in construction regarding the assessment and intervention in buildings of historical cultural heritage, in: Architectural heritage: technical, economic and legal aspects, Chişinău, 6-16.

Evremov, D. 2021, Guide for interventions on historical buildings in Chişinău, Chişinău.

Jitari, L. 2022, Enhancement of cultural heritage - an element of local and regional identity for sustainable territorial development, in: Modern approaches to heritage rights, Chişinău, 89-97.

Lesan, A. 2022, The specifics of integrating cultural heritage buildings into modern use, in: Modern approaches to heritage rights, Chişinău, 115-124.

Marian, M.L. 2022, Enhancing architectural heritage through commercial buildings, in: Modern Approaches to Heritage Rights, Chişinău, 83-88.

Ministry of Culture 2022, Regulation on the content and methodology for the elaboration of the historical-architectural reference plan and the design of the protection areas of historical localities, https://www.legis.md/cautare/getResults?doc_id=134749&lang=ro (accessed 2023).

Ministry of Infrastructure and Regional Development of the Republic of Moldova 2018, SM EN 16096: 2018 Preservation of cultural goods. Assessment and report on the state of the built cultural heritage, Chişinău

National Bureau of Statistics of the Republic of Moldova 2022, Statistical databank. Economic statistics. Dwelling and social-cultural construction

https://statbank.statistica.md/PxWeb/pxweb/ro/40%20Statistica%20economica/40%20Statistica%20economic a_18%20CON_CON020/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774 (accessed 2023).

National Bureau of Statistics of the Republic of Moldova 2023, *Tourism activity of travel agencies and tour operators in 2022*, https://statistica.gov.md/index.php/ro/activitatea-turistica-a-agentiilor-de-turism-si-turoperatorilor-in-9491_60307.html (accessed 2023).

Parliament of the Republic of Modova 2019, *Civil Code of the Republic of Moldova no.1107*, https://www.legis.md/cautare/getResults?doc_id=112573&lang=ro (accessed 2023).

Parliament of the Republic of Moldova 1993, Register of monuments of the Republic of Moldova protected by thestateapprovedbyParliamentDecisionNo.1531-XII,https://www.legis.md/cautare/getResults?doc_id=131512&lang=ro (accessed 2023).

Standards Institute of Moldova 2019, SM EN 1998 Eurocode 8: Design of structures for earthquake resistance. Catalogue of standards, Chişinău.

Standards Institute of Moldova 2020, MS EN 15898:2020 Conservation of cultural goods. General key terms and definitions. Catalogue of standards, Chişinău.

Standards Institute of Moldova 2021, MS CEN/TS 17135:2021 Protection of cultural heritage. General terms for describing changes to objects. Catalogue of standards, Chişinău.

Standards Institute of Moldova 2022, SM EN 1996 Eurocode 6: design of masonry structures. Catalogue of standards, Chişinău.