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Chapter

Alteration of the Cultural, Religious and Architectural Heritage from Lăpuș Land, in the Context of Climate Change

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Abstract

The architectural heritage is considered the most important category of cultural heritage; therefore, it requires special attention in the current state of climate change. The heritage presented in this chapter includes a total of 26 wooden churches located in Lăpuș Land, framed by UNESCO to the national heritage A and B category. Built on the present grounds or relocated, these are between 200 and 400 years old. Their degradation/alteration has been imminent over the decades due to aging and the socio-political conditions of the times. Alteration is a common notion in relation to the passage of time. The changes in environmental physical parameters, however, raise issues of sustainability of the buildings due to degradation. This paper wants to bring to the readers' attention the importance and vulnerability of murals in wooden churches of Lăpuș County, which are an invaluable treasure, in terms of constructions, objects and traditions that require a civic responsibility for future generations in these difficult geopolitical conditions overlapping climate change.

Keywords: cultural heritage, climate changes, wooden church, degradation

1. Introduction

The northern area of Transylvania is the land of Maramureş, Lăpuş, Chioar and Codrului, where we can find over 100 wooden churches built since the 17th century [1, 2]. **Figure 1** the present chapter approaches a brief narration of the current state, assessed through visual inspection, of 26 wooden churches located in Lăpuş Land, belonging to Lăpuş Archdiocese, the Orthodox Diocese of Maramureş and Satu-Mare, Targu-Lăpuş, Romania. This study will present an interdisciplinary approach to the addressed topic.

These wooden churches, of particular cultural and spiritual richness, are brought to attention in order to highlight their vulnerability in the context of such strong and obvious climate changes that are currently taking place. The wooden architecture represents one of the most magnificent examples of built heritage all over the world [3], of which, an important part is represented by the wooden



Figure 1. *Map County of Lăpuş (from https://teofil-ivanciuc.weebly.com).*

churches, often found scattered throughout Eastern and Northern Europe, and Northern Asia.

Built on the present grounds or relocated, their workmanship is established to be between 200 and 400 years old. The majority of those churches still existing today were built between 17th and 19th centuries and are represented by one type of church, namely "Orthodox church", built for the Romanian Orthodox communities [4–7].

2. Climate changes

Environmental impact on the wooden churches in Lăpuş Land is caused by the extreme weather events that have been taking place in the recent years. Climate change is continually increasing the likelihood, magnitude, and frequency of these processes which endanger these hard-to-keep values over the years [8].

The fragile paintings found inside these churches are particularly vulnerable to environmental changes. Structures, which have been standing for hundreds of years, are at risk from extreme wetting, drying, and temperature fluctuation [9].

Among the factors that significantly influence the state of degradation and endanger the future of these architectural and cultural wonders are:

- The rise in temperature, which is already notable. There is a general upward trend in global average temperature since the late nineteenth century; temperatures rose just below 1°C. Although it does not seem to be too much, it must be taken into account that a global increase in the average temperature of 2°C has not existed for over 100,000 years. This increase in temperature, changes the indoor conditions that have existed so far, favoring the appearance of mold and micro bacteria.
- The abundance of rainwater and extreme weather have become commonplace. Anticipated changes in seasonal rainfall patterns suggest that while abundant spring and autumn rainfall may become more frequent, so may drier summers. Extreme weather events are also likely to increase in frequency, with increasing

risks to the historical heritage. Both sudden heavy rainfall and the cumulative impact of less intense but repeated events can be harmful. An example in this sense is the storm of 2017, which the area with extreme force, knocked down the tower of the church in Costeni. This caused a chain reaction, allowing the rain to fall inside the church, and ultimately affecting the entire structure. The restoration of the roof, the tower, and of the whole church is still in progress and requires substantial financial aid and human resources to minimize the preservation needs of the church.

• Biogeography is a topic that should not be neglected at all, because the new distribution of animals, the abundance of growing vegetation in the gardens where wooden churches are located, and the rising of pathogens, endangers the indoor and immovable heritage.

Understanding climate change's impact on heritage in Lăpuş Land requires the identification of risks. We mention some of them: inadequate or insufficient information or experience preventing appropriate actions, damage to or loss of heritage assets, harm to heritage assets from maladaptation, damage to reputation from maladjustment, inconsistent responses or failure to respond to climate change-related impacts, geological and pedological changes causing damage to wooden churches structures, harm to heritage structures from frost fracture or harm to heritage assets from wildfire.

The consequences and scale of climate change are daunting. Although unpredictable and severe weather in the form of floods and storms is likely to be an ongoing problem, continuous change will come more regularly from less severe, yet cumulatively significant, individual impacts.

Climate change is a risk factor. It exacerbates less significant threats, creating new and unforeseen challenges. Ways to prevent significant losses are mitigation and adaptation.

Heritage is not only affected by the impact of climate change, but also by our responses to it.

3. Degradation/alteration/conservation/restauration

It is difficult to say exactly when an art object enters an alteration process. All of a sudden we notice cracks and fissures that weren't there before, small pieces that come off, fine dust that spreads around, and in the case of paintings there are gaps in the design and color. It is the imperative moment when the conservation problem arises, knowing the vulnerability of heritage objects in the fight against time and aging. The environment plays a major role in the alteration process. The main factors that influence the movable and immovable cultural heritage capital are biodeterioration, temperature and humidity conditions, natural and anthropogenic pollution [10].

New restoration techniques and studies for the improvement and conservation are constantly appearing, such as magnetic or new resonance techniques or even irradiation treatments of heritage wooden objects with different radioactive sources, particularly in the case of oil painting. These methods, however, cannot always be applied in the field [11–13].

In this case, heritage risk studies are a welcoming site, as an alarm signal, before the moment of alteration, in order to bring the issue to the attention of all stakeholders in due time for mitigations to be effectively executed. According to specialized studies, the implementation and analysis of a typical diagnostic study and structural analysis are necessary to assess the main risks affecting the property in order to result in risk indicators [14, 15].

The group of factors that participate in the degradation process and can be considered as major or minor risks for construction materials and structures, is complex and includes visual documentation of disintegration, main forms/types of disintegration, disintegration mechanisms, and intrinsic and extrinsic factors of degradation [16].

For example, the protocol of decay investigation include visual observations of the building material's state of conservation, typology of deterioration phenomena, decay mechanisms, decay intrinsic factors, and decay extrinsic factors.

In the frame of the present project, we intend to further study the extrinsic decay factors, such as structure general data, climate data, atmospheric conditions, indoor environment, biological factors, accidental actions, human impact, condition of usage, socioeconomic parameters or geotechnical frame of foundation [17].

Alteration is a common notion in relation to the passage of time. According to dictionary definition, alteration means transformation or change in the negative, involving a chemical change in the material, in the case of pigment murals, while damage involves only physical phenomena [18–20].

Degradation, a commonly used term in contemporary theory, refers to a state of actuality of the object.

Literature suggests that if the degradation occurs unintentionally, but in a positive manner, the effect is known called "patina" (involving the chemical transformation of organic or inorganic materials in the work). Over time patina has acquired a status in the aesthetic qualification of an object [18]. On the other hand, if the degradation occurs unintentionally, but in a negative manner, then we are talking about degradation [21].

From this moment, the conservation-restoration stage appears, which represents the entire action of saving a work of art from the past.

The field of restoration in Romania operates on the basis of the legislation issued in 1974, which was subsequently established by the Norms of 1982, 1993, and 2003. Following these legislative directives, the meaning of the terms Conservation and Restoration implies two distinct actions. The first involves only a preventive action on the object while the latter offers the possibility to exercise a proper curative preservation [22].

The way that conservation is carried out has suffered many changes throughout the last 50 years. There have been numerous developments in methods to measure and control environments and ways to protect objects on display and in transit [23]. But in the end, it all comes down to time and costs.

The proportion of time and effort dedicated to interventive conservation in heritage institutions appears to be decreasing. Arguments based on cost efficiency and risk reduction are sometimes employed as justification. Arguably, the situation is not straightforward and the ethical and economic arguments for doing less intervention are not always consistent or convincing [23]. Nevertheless, the degradation/ alteration has been imminent over the decades due to the socio-political conditions of the times.

The conservation-restoration of some churches to be presented hereafter has been done over many years with various funding and with numerous volunteering hours from the communities, under the careful guidance of local priests. "Patina" can be observed in just a few churches. Others were left behind for socio-administrative reasons. Their importance remains the same over the centuries whether or not the villages remain sufficiently populated. Their protection is an absolutely necessary and justified act, not only from the perspective of the object as a material

value in open space but from the importance of cultural value that speaks of a Romanian nation who made efforts to keep to this geographical area, regardless of the historical context and who are now facing globalization and climate change.

Obtaining funds for conservation restoration remains a sensitive and open topic.

4. The wooden churches

The wooden Orthodox churches from Lăpuş Land are an example of remarkable heritage with similar architectural features and interior paintings from the same time frame and region. Their overall beauty, the language of interior ornaments, and paintings once again confirm the invaluable value of national and universal heritage, early messages of anonymous peasant artists. We find a vivid portrait of this area through the diversity of paintings, wooden decorations, and craftsmanship expressed in these medium-sized wooden buildings, equipped with a narrow bell tower erected as high as possible and protected with shingled roofs. This is a vernacular expression specific to the cultural landscape of this mountainous region of northern Romania [24].

Most churches are located on high hills, in gardens with trees, having a cemetery around them or in their close vicinity. They are medium-sized construction spanning between 20 m long and 5 m wide. Their roof is covered with *draniţă*, a wooden shingle specially made by local craftsmen. The heights of the towers differ from church to church. The overall assessment of the buildings was made directly, through visual inspection on site, and indirectly, by consulting local chronicles and other sources or discussions with villagers and museum supervisors. A significant input in identifying the structural and decorative elements was Pamfil Bilţiu's book "Wooden churches in Lăpuş Land" [25].

The wooden churches addressed in this chapter have been classified as heritage monuments category: Unesco, A, or B [26].

5. UNESCO heritage

5.1 The wooden church of "Saints Archangels Michael and Gabriel" from Rogoz

Historically dated to the 17th century (1663)

Official registration: UNESCO

Rogoz village, lying on a bright plateau of the land of Lăpuș, attracts attention through its uncontested cultural richness.

Set in a small garden, in the middle of a cemetery, the church of "Saints Archangels Michael and Gabriel" from Rogoz was built in 1663, according to the inscription engraved on the front door. The church was built shortly after the old church was set on fire by the Tatars in 1661, fact also indicated by the inscription on the front door. The imposing tower is estimated to have been erected during the restoration works that took place in 1785. The most recent restoration took place in 1961 and was conducted by the Romanian Directorate of Historical Monuments. This church is the most representative of the Lăpuş Land, being registered in the Unesco patrimony. Here we come across elements from the Western Gothic, the traditional Romanian Orthodoxy, and the pre-Christian roots of Maramures. The church is built of massive elmwood beams, closed at right angles and reinforced in places with thick wooden dowels.

According to the Cyrillic inscriptions kept on the altar, the church was painted in 1785, "In 1785 this holy church was painted during the life of the High Emperor

Joseph II ...". The painting works began in 1717: "Since 1717, the painters being Munteanu Radu from Ungureni and Man Niculae from Poiana Porcului" (inscription in the nave, on the northern wall) and were finalized in 1785: "It was in 1785, on June 10 we started to paint this holy church and it is September 11 that the painting was completed" (inscription in the nave, on the southern wall), the painters being Radu Munteanu from Ungureni (neighboring village of Rogoz) and Niculae Man from Poiana Porcului.

Currently, some scenes are fragmented while others are entirely erased. The painting includes scenes from the Old and the New Testament. In the narthex, the dominant theme is that of the *Last Judgment*, where, hordes of pagans condemned to Hell are represented by figures dressed in Western clothes similar to those painted by Radu Munteanu in the wooden church in Desești (**Figure 2**) [24].

The painting has been restored and it is currently in a good state of preservation. Here we can talk about the patina of painting indeed. The fact that the church has received a superior classification, and the attention paid to careful care, lead to long-term preservation.

5.2 Heritage A

5.2.1 The wooden church of "Saints Apostles Peter and Paul" from Poiana Botizii

Historically dated to the 19th century Official registration Cod LMI: MM-II-m-A-04515

Local sources relate that, in the northernmost village of Lăpuş Land, in the village of Poiana Botizii, at the foot of the mountains, in 1809 the construction of a new wooden church began on the old existing place, on the same spot where the old church was cremated. In 1819, when the building works were completed, the sanctuary was consecrated, receiving the patron saint of "Saints Apostles Peter and Paul". In 1906 began the painting works on the interior walls, were entirely funded by the local community. The new church, however, proved to be too small, which is why in 1920 an addition-extension was built. Subsequently, consolidation works



Figure 2.Indoor painting – wooden church of "Saints Archangels Michael and Gabriel" from Rogoz.

took place. In 1974, a period of major modernization in that area, electric lights were introduced, which continue to function until today (**Figure 3**).

Located on top of a hill overlooking the village, surrounded by the cemetery, the church is an imposing presence, with a length of about 17 m and a width of about 5 m. It is built of oak wood, following a ship-type plan, with beams joined in a dovetail. The wooden soles are placed on stone vaults, which form a solid foundation. The upper beams, by extension, form consoles, on which a hipped roof is placed, covered with *draniță*. Through the additional extension – the awning that was intended as a place of entry – will become a narthex. This greatly increases the nave while the altar remains at its original dimensions. Above the nave, in the middle of the roof, rises the tower formed by a single plank section. Currently, the church is in good condition, but if no measures are taken, the wood caries will start working because winters with high frosts have been replaced with mild winters, without snow, which led to the formation of cavities in certain parts of the building material.

5.2.2 The wooden church of "Saints Archangels Michael and Gabriel" from Stoiceni

Historically dated to the 18th–19th century Official registration Cod LMI: MM-II-m-A-04754

The exact date of construction of this church remains uncertain. There are some sources declaring its construction around 1860 while other sources send us far behind, in the eighteenth century. This church is built on top of a hill, from where one can see the Stoiceni village. Local sources and tradition tell us that it was built on the site of a previous church (it is unknown why it was replaced), but the initial *Holy Mass* was preserved. It follows the planimetry used at that time and in that geographical area, namely porch, narthex, nave, and polygonal altar. The entrance portal has a massive frame. The narthex is separated from the nave by a wooden wall with two openings with cut arches. The portal of the passage door is painted with floral motifs. In the nave, we find an inscription with Latin spelling that dates back to 1872, when the interior painting was executed. Saints and Martyrs are



Figure 3.Indoor painting – wooden church of "Saints Apostles Peter and Paul" from Poiana Botizii.

painted in the narthex, according to tradition, and the scenes of *The seven-headed dragon* and *Death with Adam's head and shins*. On the walls of the nave, we find biblical faces and scenes: *Adam and Eva in Heaven*, scenes from the Passions (**Figure 4**). The half vault and the vault are painted with faces: *Saint Mary*, *Saint Alexander*, *Saint John*, and the *Evangelists* (**Figure 5**).

The hierarchs and *The Last Supper* are depicted on the altar.

The interior painting is in very good condition, taking into account the normal aging. Perhaps one reason for this good preservation would be the fact that the



Figure 4.

Adam and Eva in the garden of haven – wooden church of "Saints Archangels Michael and Gabriel" from Stoiceni.



Figure 5.Half-vault painting – wooden church of "Saints Archangels Michael and Gabriel" from Stoiceni.

roof is covered with galvanized metal sheets, which led to better protection of the interior environment. One other hypothesis would be the geographical location. The bell tower rises above the roof. Unlike the body of the church, the tower is covered with *draniţă*. If the roof would be rebuilt to include the original roofing stile (*draniţă*), perhaps it might have a chance of a superior heritage framing.

Outside the church, the Mass of the Elders is still preserved.

5.2.3 The wooden church of "Saints Archangels Michael and Gabriel" from Ungureni

Historically dated to the 18th century Official registration Cod LMI: MM-II-m-A-04788

"When it was vlet from Christ 1782 made this church the ununited" is engraved inside the church, above the entrance door leading to the narthex. It is a medium-sized church, also placed on a hill, in the center of a village spread over a considerably large area. The planimetry is the most common, with a narthex, nave, altar, and an entrance located on the western side of the narthex. It is built of massive ash wood beams. The beams at the top form consoles with rich ornamentation at the ends. The narthex is ceilinged (it has a built-in ceiling) and the nave and narthex have a semi-cylindrical vault. The interior of the church has been painted in its entirety. There are no historical data regarding the master painter, who remains unknown until today. The church is altogether well preserved, even if the painting is quite altered, to the point of being entirely erased in many places. Its state of conservation is mostly due to its maintenance and attentive care paid by the local community (**Figure 6**).

5.2.4 The wooden church of "Saints Archangels Michael and Gabriel" from Vima Mică

Historically dated to the 18th century Official registration Cod LMI: MM-II-m-A-04795

The architectural peculiarities of this church place its foundation in the second part of the 18th century. It is located on a beautiful plateau inside the village of



Figure 6.The beheading of St. John the Baptist – wooden church of "Saints Archangels Michael and Gabriel" from Ungureni.

Vima Mică. The *Cross of Jerusalem* is carved around the entrance door to greet the parishioners. Inside, we can read the inscription from 1854 with the announcement that the roof was "shingled". It consists of narthex, nave, and altar. The bell tower has a frustoconical helmet that ends at the top with a cross with three arms and a crescent. The roof has two more small towers. The painting inside is of extraordinary beauty, in light blue tones, which gives it a unique value. In 1902 an unknown painter partially restored the painting (according to local sources). At the entrance to the narthex, we are greeted by the *Tree of Life* and an old chest above which is painted a scene that urges you to reflect: *Jacob's dream* (**Figure 7**).

The door is also decorated in a special style. The scenes from Passion on the western wall are very well preserved compared to the opposite wall and vault where the painting shows signs of deterioration. When passing between the nave and the narthex, the walls at the joint is in a severe degradation state, which gradually led to the alteration of the painting. The intact painted scenes appear clearly and have a high chance to be saved for perpetuity (**Figure 8**). There is a file pending for the rehabilitation of the church. The wooden structure and the roof are to be rebuilt and consolidated.



Figure 7.Jacob's dream – wooden church of "Saints Archangels Michael and Gabriel" from Vima Mică.



Figure 8.Myrrh-bearing women – wooden church of "Saints Archangels Michael and Gabriel" from Vima Mică.

5.2.5 The wooden church of "Saints Archangels Michael and Gabriel" from Răzoare

Historically dated to the 18th century Official registration Cod LMI: MM-II-m-A-04610

The church is located at the base of a hill, with the northern wing very close to the slope with vegetation. Several sources and hypotheses place its foundation before 1730. Other sources speak of the initial construction somewhere on the bank of the Lăpuş river, in 1759 being relocated to its current location. Writings found indoors mention this year as the year the interior walls were painted. The church has a porch from where we enter the narthex, nave, and altar. The porch is supported on three pillars attached to the crown. The most important exterior decoration of the church is represented by the geometric motifs found on the porch structure. The entrance door to the church has an ingeniously worked wooden lock. The roof has a bell tower, which has a gazebo over which is placed the roof with a square base, rounded to the top, flanked by four turrets with a gazebo, and simple crosses finished with crescents. The wooden interior proves the mastery of the craftsman who remains unknown.

The painter "Petre Diul (Deacon, n.n.) from Preluca", signed the royal doors in 1759, which is why the interior painting is also attributed to him. Unfortunately, the state of advanced degradation of the painting does not give us an optimistic image of the future of this church. The careful care of the caretakers will not solve the severe degradation state that affects the wooden structure, with serious damage to the altar, while the hardly visible painting left has a great chance to be lost under the patina of time.

The entrance to the underground galleries of a non-ferrous mine use to be at a very short distance from the church. We hypothesize that the long years of mining exploitation, with heavy traffic and underground works, weakened the wooden structure of the church, which implicitly led to the deterioration of the indoor painting (**Figure 9**).

5.2.6 The wooden church of "Saints Archangels Michael and Gabriel" from Libotin

Historically dated to the 18th century

Official registration Cod LMI: MM-II-m-A-04596;

Entering through a wooden gate specific to this northern part of the country, we encounter the wooden church located in a beautiful garden that also serves as a cemetery. A fading inscription on the door places it back to 1671. There are local sources that speak of it having been built in 1761, but others show that it was erected in 1811. However the case, the villagers support the story passed down from generation to generation that it was brought to Libotin from Remetea Chioarului. This seems to be a very plausible scenario, the transshipment of an old construction being a normal habit in those times. This scenario would also be supported by the fact that it is a small, ship-shaped structure, made of elmwood. The roof is covered with *draniţă*, feature that we find to be a symbol of the area. The entrance is made through a door enclosed in a wide frame carved with crosses. The roof rests on short beams, decorated on the outside by rounding. The entrance is made through the south side.

The bell tower, located above the narthex, has a square shape, with a gallery and a planked railing, with the lower ends of the planks decorated with heart motifs, a symbol of eternal love. The tower has a pyramidal steeple, which ends with a simple metal cross resting on an onion-shaped bulb. The frame of the entrance portal to the narthex is decorated with the trefoiled cross motif, repeated on the vertical pillars of the door.



Figure 9.

Indoor painting – Iconostas – wooden church of "Saints Archangels Michael and Gabriel" from Răzoare.

The interior walls of the church preserve the old painting that presents biblical scenes. The semi-cylindrical vault of the apse and the ceiling of the narthex have been restored, and the semi-cylindrical vault of the nave presenting a restored representation of the first chapters of *Genesis* and the *Ascension of Elijah* (**Figure 10**). This church had the benefit of having its painting restored. Amongst its painting, we can find a unique representation of *Saint Christopher*, that few people are aware of **Figure 11**.

5.2.7 The wooden church of "Saint Dimitrie" from Larga

Historically dated to the 19th century Official registration Cod LMI:: MM-II-m-A-04594;

The wooden church from Larga village is located on a hill surrounded by the old cemetery, with a wide glade at its base. Probably hence came the name of the village (Larga – tr. wide). Above the entrance one can see the following Cyrillic inscription from 1802: "The village priest with his wife Paladie today 1802 in the days of the exalted emperor Francis I (Francis II 1792-1806, Francis I of Austria, 1804-1835, n.n.)... when I made it ... ". It was, however, consecrated only in 1816. Similar to previously described wooden churches, it has the entrance on the south side of the narthex, then the nave and altar. The hipped roof is also covered with draniţă. The bell tower has a gazebo and a balcony, and the helmet has pentagonal eaves. The frame of the entrance door to the church is entirely covered with decorative patterns. Although the painting is damaged, one can still see its beauty and value in areas that have escaped the weathering. In the narthex, one can find the Cyrillic inscription attesting that it was painted by Gheorghe Opriş. On the western wall of the narthex, there is a painting of the Wheel of Life, guarded by the Sun and the



Figure 10. Indoor painting – Libotin's wooden church of "Saints Archangels Michael and Gabriel".



Figure 11.Saint Hristofor – wooden church of "Saints Archangels Michael and Gabriel" from Libotin.

Moon, while on the eastern wall is represented the *Last Judgment* and the cycle of the *Wise Virgins* and the *Mad Virgins* (**Figure 12**).

The northern wall of the nave is painted with saints in vaulted frames and scenes from the New Testament and the Passion. The iconostasis is in an advanced state of degradation, yet the faces of *St. Anthony* and *St. Euthymius* can still be identified. The altar preserved some scenes and figures of saints but equally degraded. The face of a Saint with a cross stands out on the southern wall, through the altered painting (**Figure 13**).



Figure 12.The wheel of life – wooden church of "Saint Dimitrie" from Larga.



Figure 13.Saint on the wall – the wooden church of "Saint Dimitrie" from Larga.

5.2.8 The wooden church of "Saints Archangels Michael and Gabriel" from Inău

Historically dated to the 17th century Official registration Cod MM-II-m-A-04589;

The wooden church from Inău village is located on a hill with a slight slope, between the hills that form the village. Some sources say that it was originally built in 1689 in Baia-Mare, from where it was bought by the villagers from Rus, and later moved to Inău. Other sources indicate the year 1778 as its foundation. It is a beautiful, robust construction including a porch, narthex, nave, and altar. The roof covered in *draniță* was completely rebuilt in 1940. The bell tower has a square base and a gallery, the helmet being largely extended and flanked by four turrets. The entrance door is made of two pieces, carved with honeycomb and rosette motifs in the background. At the junction of the two parts that make up the door, is carved a cross. At each part of the cross is written the name of the four Evangelists: *Mark*, *Luke*, *Matthew*, and *Joan*. The door portal surrounding the main door is decorated with broken lines, fir branches, honeycombs, the cross with two horizontal arms, semicircles, rosettes, and the tulip stem.

During the years of modernization, electricity was introduced, and the old wooden chandelier was now equipped with electric lights. Scenes such as *Heaven*, *Jesus Surrounded by the Apostles*, and scenes from the *Passion of Jesus* can hardly be identified in the narthex. The half-vault and vault of the nave represent evangelists and scenes such as *Holy Trinity*, *God surrounded by trumpeting angels*. Unfortunately, the painting has not been very well preserved, being almost entirely erased, and current environmental factors will not help to preserve it for the future (**Figure 14**).



Figure 14.Narthex painting – wooden church of "Saint Archangels Michael and Gabriel" from Inău.

5.2.9 The wooden church of "Saints Archangels Michael and Gabriel" from Drăghia

Historically dated to the 18th century Official registration Cod MM-II-m-A-04569;

The church was built in 1706 on a hill, surrounded by the cemetery, as it was the local custom. The ground it was built on belonged to the local Radu family. It had the opportunity to be rehabilitated as a structure (see chapter "Cultural heritage of a three centuries-old wooden church", Heritage Intech Open 2020). The entrance is through a massive wooden door located on the south side, that preserves the old wooden locking system with a two-piece metal key (see chapter "The movable heritage", Heritage New Paradigm 2021). It was built of solid oak beams, with the soles placed on a stone foundation. On one of the oak beams, to the left of the front door, is written the year of construction of the church: "Anno 1706 D. 14 obrys" (Year of the Lord 1706, October 14). On the royal doors is written the year it was painted: "1797 This pomade was paid by Toma Opris and his wife Marie and their sons Philip, Stephen and his sister Theodora Anisia. I painted Petre". It was executed by Petre Diacul from Preluca, but the weathering left serious marks on it. In the narthex, we find images of Wise Virgins and the Mad Virgins, Myrrh-bearing Women, and other biblical scenes. The Angel looks down at you from the painted ceiling (Figure 15). The door to the nave is painted (see the chapter "A survey of physical parameters and natural radioactivity in the wooden church of "Archangels Michael and Gabriel" Drăghia", Heritage Intech Open 2020). On the inner wall of the iconostasis is the well-preserved figure of the High Priest Melchizedek (**Figure 16**).

Unfortunately, the inside painting is in an advanced state of degradation, despite all the maintenance efforts [26].

5.2.10 The wooden church "Saints Archangels Michael and Gabriel" from Dobric

Historically dated to the 18th century Official registration Cod MM-II-m-A-04568;

The church is known by the locals as *The church on the hill*, for two reasons. Firstly, for the obvious reasons, it has been built on top of a hill, with a large cemetery around it. Secondly, because there is another wooden church in the same



Figure 15.Angel – wooden church of "Saints Archangels Michael and Gabriel" from Drăghia.

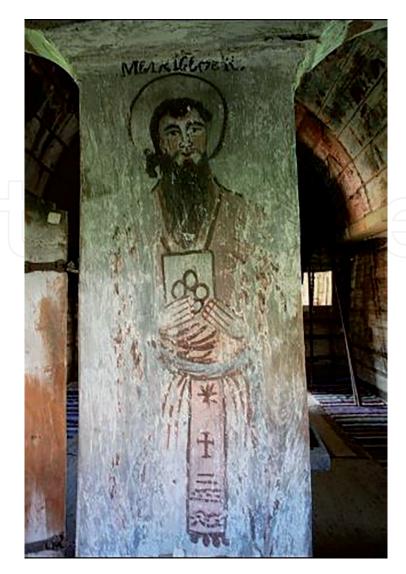


Figure 16.High Priest Melchizedek-wooden church of "Saints Archangels Michael and Gabriel" from Drăghia.

village, but in the valley. Limited information is available about de historical dating, just that is was sometime around the 18th century, maybe sooner.

It is a medium-sized construction, built of oak beams on a stone foundation. The entrance, without a porch, is made through the southern part directly in the narthex followed by the nave and the altar. A beautiful strip, with the rope of life carved in wood, surrounds the church. In 1930, the shingle roof was rebuilt with a *draniţă*, covering an extension of the *Table of the Elders*. The church tower is covered with tin sheets. Indoor we can find a beautiful painting, relatively well preserved, with the framed faces of male and female Saints (**Figure 17**).

Entire scenes are preserved in both the narthex and the nave, such as the *Wheel of Life* and scenes inspired by Revelation (Apocalypse). The vault and the joint areas suffered bad weathering. The chances of conservation for this church remain uncertain (**Figure 18**).

5.2.11 The wooden church of "Saint Elijah the prophet" from Cupșeni

Historically dated to the 18th century Official registration Cod LMI: MM-II-m-A-04562

The church, located like the others on a hill belonging to the village, has an uncertain historical date. Official data acknowledge it has existed since 1733. On the altar, we find a partially erased inscription announcing the historical dating of the painting:



Figure 17.Saint Paraskeva – wooden church of "Saints Archangels Michael and Gabriel" from Dobric.



Figure 18.The wheel of life and the Revelation (Apocalypse) – wooden church of "Saints Archangels Michael and Gabriel" from Dobric.

"This saint... too the high emperor... Francis first bishop... being... and prot... the ununited place John... 1823." It is of medium-small dimensions, with a porch, narthex, nave, and altar. It stands out through the staircase that goes up to the tower, its steps being hollowed out in a single tree trunk. It is covered with wooden shingles, and the bell tower is massive and square-shaped. The interior painting in the narthex is almost completely destroyed, half of the ceiling and a wall has been rebuilt. In the altar, the



Figure 19. *Iconostasis – wooden church of "Saint Elijah the prophet" from Cupșeni.*

painting is likewise compromised. The paintings of the apostles on the iconostasis are hardly preserved, showing an increasingly pale coloristic over time (**Figure 19**).

5.3 Heritage B

A number of 14 wooden churches (**Table 1**) spread throughout the same geographical area also bring their heritage contribution. Presently there are only classified as being of local interest. The future might bring the chance, for some of them, to be ranked higher. Similar to those in heritage category A, they are built of

Nr.	Name of the church	Location	Historically dated	Official registration COD
1	Saints Archangels Michael and Gabriel	Boiereni	18 th century	LMI: MM-II-m-B-04526
2	Saint Nicholas	Costeni	19 th century	LMI: MM-II-m-B-04554
3	Saints Apostles Peter and Paul	Costeni	19 th century	LMI: MM-II-m-B-04555
4	Saints Archangels Michael and Gabriel	Cufoaia	19 ^h century	LMI MM-II-m-B-04560
5	Saints Archangels Michael and Gabriel	Cupșeni	18 th century	LMI MM-II-m-B-04563
6	Entrance in the Church	Dobric	18 th century	LMI: MM-II-m-B-04567
7	Saints Archangels Michael and Gabriel	Dumbrava	18 th century	LMI MM-II-m-B-04571
8	Saint Mary	Fântânele	18 th century	LMI MM-II-m-B-04573
9	Saints Apostles Peter and Paul	Groape	19 th century	LMI: MM-II-m-B-04582
10	Saint Paraskeva	Izvoarele	20 th century	LMI MM-II-m-B-04591
11	Saints Archangels Michael and Gabriel	Jugăstreni	19 th century	LMI MM-II-m-B-04593
12	Saints Archangels Michael and Gabriel	Peteritea	18 th century	LMI MM-II-m-B-04602
13	Saint Dimitrie	Răzoare	18 th century	LMI MM-II-m-B-04611
14	The born of Saint Mary	Vălenii Lăpușului	18 th century	LMI MM-II-m-B-04792

Table 1.With wooden churches Heritage B from Lăpuș Land.

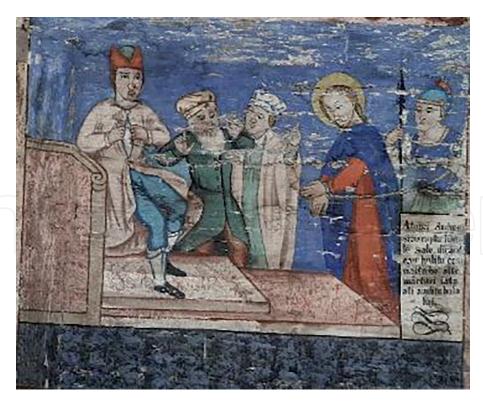


Figure 20.

Inside painting – wooden church "Saints Archangels Michael and Gabriel" from Jugăstreni.

wood, keeping the same typical architecture. The date of construction is between the 18th and 20th centuries. They are located on plateaus or hills of the villages from Lăpuşului Land. Being later put to use, they receive electricity and plastered indoor walls, which has led to better preservation over time. Some of them were painted on the inside plastered walls or on the wooden vaults, keeping with the spiritual charm of the area. An eloquent example is the painting, with a beautiful patina, from the wooden church of "Saints Archangels Michael and Gabriel" from Jugăstreni (**Figure 20**).

At the same time, they had been fortunate with tin roofs. Many of them are still used as churches of worship, on Sundays and religious holidays over the year. This is also the reason why they have been equipped with heating systems by the parishes (**Table 1**).

6. Conclusion

The wooden churches of Maramureş are perhaps the most significant visual symbol of the area. Considering that they have been around for several hundred years in these conditions, we can say that they did their job and played their role quite well.

However, their further survival depends on a few essential factors. Given that wood itself is not a weatherproof material par excellence and undergoes a natural process of degradation, it requires continuous specialized care and restoration, done with maximum awareness and knowledge of the work process. This process must involve substantial funds dedicated to these operations. Today's changing climatic conditions add up to our call for attention to the need for restoration work. Climatic conditions have been demonstrated to affect the art inside religious buildings, with painting suffering the most. Of course, we consider not only the

perishability of wood as a material but also other factors that affect the structure of these constructions, such as displacement and changes in soil structure.

Perhaps the most important step for the preservation and further existence of this heritage of inestimable value must lead us beyond the actual preservation, which of course is essential and should be the starting point. Most of all, an educational campaign to make people aware of the spiritual and aesthetic value of this heritage in everyday life is absolutely necessary. Special attention should be paid to the learning and dissemination of this very special craft. If the craft of woodwork were still desirable and learned by young people in educational institutions if churches would continue to be built respecting the proportions and simple materials if the church painting would be executed in line with the values of simplicity and humiliation of the Maramures peasant and especially if the religious courts, Orthodox dioceses, would order works in this style, tradition, and heritage would not represent only an elitist concern or of those that are part of a museum context but would return to the circuit of everyday life. We must learn today how to build this type of edifice that represents our spiritual essence.

Acknowledgements

This work was supported by a grant from the Romanian Ministery of Research and Innovation, CCCDI – UEFISCDI, project number PN-III-P1-1.2-PCCDI-2017-0476/51-PCCDI/2018, within PNCDI III, ACRONIM: ARHEOCONS.





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