# WOOD CHURCHES OF ROMANIA AND NORWAY COMPARATIVE CONSIDERATIONS

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#### Abstract

The paper presents a comparison between the construction and decoration of Romanian and Norwegian wood churches, pointing out on their resemblances and differences.

Keywords: resistance structure, decorations, spiritual fund

#### 1. Introduction

With respect to the main aspects of Romanian wood churches, especially those from Maramureş region in the northwest of the country, one cannot pass without noticing many remarkable resemblances between these and the Norwegian wood churches.

Such resemblances do not come from the mutual influence between the inhabitants of these two distant countries, but from the manner in which the constructive genius of the respective inhabitants has addressed the building of Christian worship places, taking into account the building materials available and the rigours of their climates.

Indeed forests are abundant, especially with coniferous trees, both in Romania and in Norway - at northern latitude below 64° in the latter case, while great amounts of snow fall during winter, which strain the resistance structures of those churches and have to be quickly removed to avoid gathering [1].

Another aspect worth considering is the historical time when the respective populations became Christian and their respective Christian creed.

Christianity penetrated Romania's territory beginning with 1<sup>st</sup>-2<sup>nd</sup> centuries after Christ, when Apostle Andrew came to Tracia and the Roman legions came to Dacia. The Christian creed adopted was the Byzantine Orthodox one, which allowed the utilisation of icons.

Christianity arrived in Norway much later, around the 11<sup>th</sup> century after Christ, under the influence of Danish kings and with the Roman Catholic cult, which however the population rejected and the Lutheran creed was adopted that do not use anthropomorphic representations. This has led to certain limitations in the decoration of worship places [2].

The first wood churches of Romania and Norway could not withstand time and they were either destroyed or rebuilt, maintaining however the initial constructive solutions.

### 2. Constructive layout and resistance structure of wood churches

The oldest wood churches of Romania and Norway were made with a plane rectangular shape and a ridged roof with two highly sloping sides to allow sliding the great amounts of snow, (Figure 1) [3]. The church was later divided into altar, nave, narthex and porch, while keeping the traditional Christian direction with the altar towards east and the entrance towards west (there were rarely side entrances).

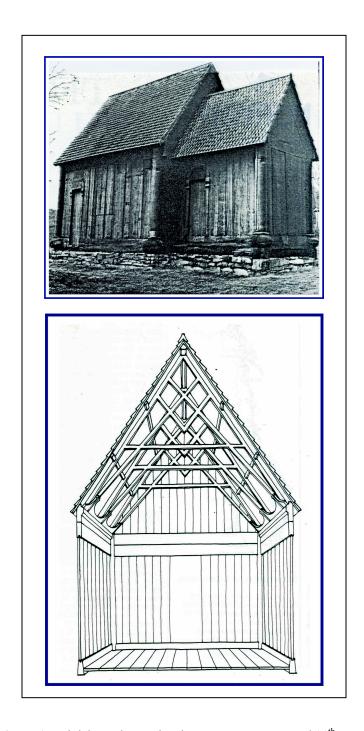
An important difference between the Romanian wood churches and the Norwegian ones relates to the lateral nave walls, which are made of thick oak or fir beams placed horizontally and joined in various ingenious modes (dovetail, with round girders, little dog) in the former case, thus providing a strong supporting base for the roof. Grossly finished wood beams provide however gaps between them, which initially got walled up with moss and grass from the outside, but in time some of the beams would fall down.

The church floor was made of stone slabs and gravel, usually covered with 25-30 cm-thick and sometimes 1 m-wide wood planks. The floor belongs to the foundation of the entire church, which is a little bit elevated from ground level (Figure 2) [4].

But in Norway the lateral nave walls are made of vertical planks, with their ends fitted into grooves made along girders placed at the base and top of the planks. Base girders were initially placed directly on ground and later on a stone foundation, but the plank floor was fixed into the base girders without touching the earth. Since the nave walls were manufactured like this, the resistance structure of the church had to be made inside it.

The first wood churches of Norway were not so high and had strong wood poles (in Norwegian 'stave'), located in a row in the middle of the central corridor separating the lateral benches for people. These poles connected the lateral nave walls between them using various wind bracing systems, thus sustaining the roof at the same time (Figure 3). Such highly resistant poles were directly founded in the soil, and therefore were exposed to rotting in time, the same as the girders at the nave base and the planks of the respective walls. None of the 29 churches built using this technical solution after the 11<sup>th</sup> century remained, since they cannot last for more than 200-300 years.

The building material having deteriorated, Norwegian wood churches cannot be disassembled and re-mounted in other locations. They have to be demolished and rebuilt fully with new materials.



**Figure 1.** Haltdalen. View and resistance structure; around 11<sup>th</sup> century.

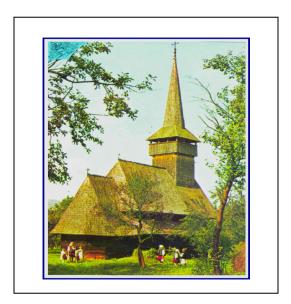


Figure 2. Bogdan Vodă (Cuhea). Double hem roof; rebuilt in 1718.

However, the construction of Romanian wood churches allows their disassembling into component sub-assemblies and their re-installation in other locations, which is actually performed in many cases because of the need for bigger churches, but also due to the tourists' interest in such folk art monuments that are thus carried into many corners of the country.

Romanian wood churches from Maramureş usually maintain one or two roof levels and have a single tower built over the narthex or over the porch (Figure 4). These churches are provided with a layer exceeding the roof edge, with however a smaller gradient than the roof meant to make snow fall farther from the church foundation to prevent damaging its stability. Such constructive solution is called 'double hem roof' (double eaves).

The length of Romanian wood churches is limited to 10-15 m, depending on the beams that can be procured from the forest. This limit does not apply in Norway, where the nave walls made of vertical planks can be extended. In exchange, Romanian wood churches reach to over 50 m high because of their tower spire (e.g. the church in Surdeşti is 54 m high, and the new one in Bârsana 57 m) and are thus twice as high as the Norwegian ones.

The tower of Maramureş churches is provided with a watch structure as it was the tallest construction in the area, and in certain cases it has other four small towers on the roof of the watch structure. According to the ancient custom, such small towers meant that the old men's council was entitled to make judgment only in those communities, (Figure 5).

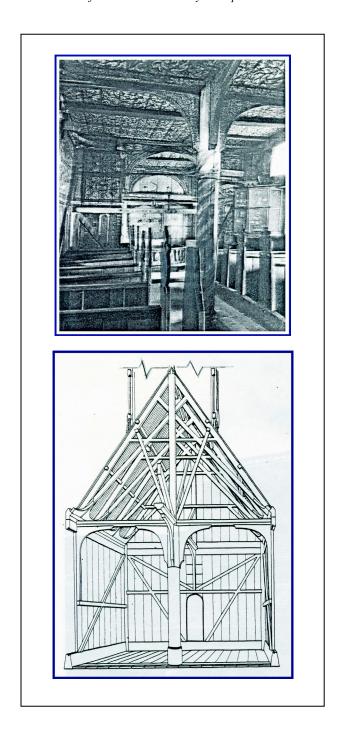


Figure 3. Uvdal. Inner view and resistance structure; around 12<sup>th</sup> century.

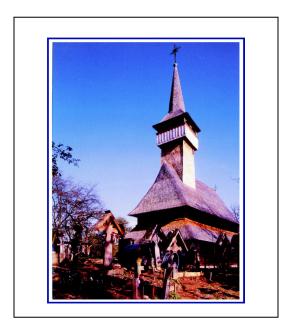
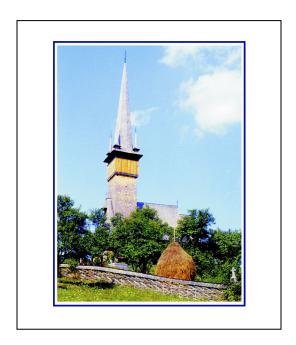
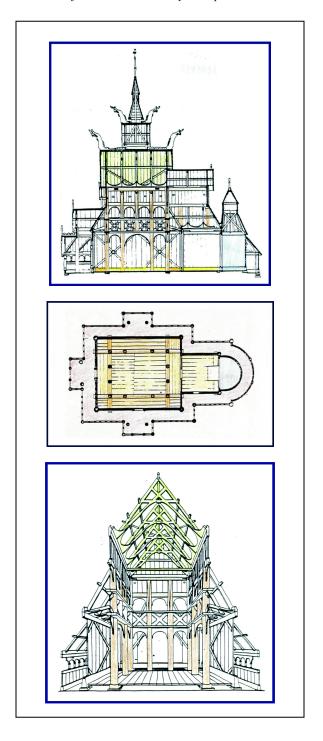


Figure 4. Rozavlea. View. One ridge roof; rebuilt in 1717.



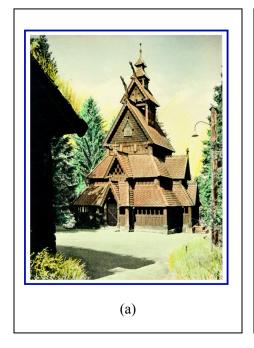
**Figure 5**. Plopiş. View. Roof with four little towers; rebuilt in 1796.

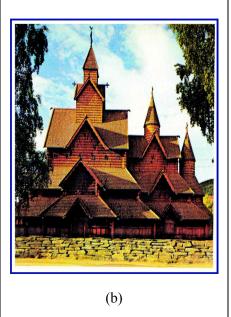


**Figure 6**. Borgund. Section. Plan. Resistance structure; the biggest wood church in Norway, around 1150.

Romanian and Norwegian wood churches, including such towers, are covered with fir tiles of various shapes. Straight, round, dovetail, honeycomb, duckbill etc. tiles have been used for roofs in Maramureş. The various church accessories (tables, pews, but also the tiles) were formerly fastened using yew nails (a fir tree of hard wood). An access staircase to the tower bells is made in the open or close porch of certain Maramureş churches, which was made by carving the stairs in a single fir trunk but without handrail, which proves the ability of church helpers. In time, an apse was built for the altar proper, with a polygonal shape (4-5 sides) in Romania and semi-circular in Norway, in both cases a little bit shorter and narrower than the respective nave. Such a constructive detail called 'out-shaped apse' points out the compartment where the religious service takes place.

Larger wood churches of Norway tried to mimic the Gothic style using wood structures, by longitudinally dividing the nave with intermediate poles into three compartments and making traditional outer buttresses by means of a corridor along the nave, at the ground floor, (Figure 6) [5]. Such an imposing wood church can be found in the entertainment park from Norway's capital city, Oslo, (Figure 7a). The roof of Norwegian wood churches was given ever more complex forms, with many different heights of the covers and many square- or round-base towers, but without watch structures (Figure 7b) [6].





**Figure 7**. (a) Bugdoy. View. Bestiaries on the roof; cock on the tower, rebuilt in Oslo; (b) Heidal, view

#### 3. Inner and outer decorations

Decorations used in the Romanian and Norwegian wood churches aim at providing a festive environment, more agreeable to the people's meetings, while also improving their comfort degree.

In the Romanian Orthodox churches icons play an important role in decorating the interiors, as they depict scenes of the Old and New Testament and naïve pictures were made either directly on the wall beams or on canvas glued to the wall, when gaps were found between beams, (Figure 8) [7]. Many such paintings are found also in the wood church of Ieud uphill, the oldest wood church in the country for the moment (which local people call Susani, meaning 'from uphill', to the difference of churches located in valley regions, 'downhill', which local people call Josani), (Figure 9). Many times the topics of such paintings include also pre-Christian symbols. Thus the sun is shown like a knight in armour, being the symbol of life, knowledge and wisdom because it sees everything, knows everything and therefore knows the truth, (Figure 10). Sometimes the moon is represented besides the sun, in its first quarter, showing a woman's profile, (Figure 11). There are only a few colours used in the paintings, white being dominant and besides it there is red, blue, ochre-yellow and green. The tones of such colours are however pure, clean, alive.

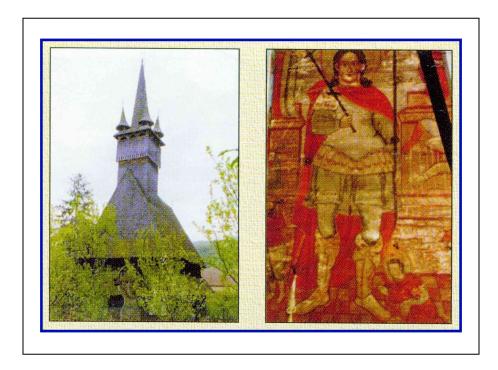
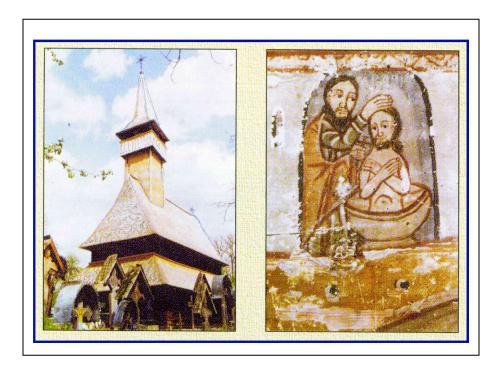


Figure 8. Budești. View. Icon of St. Dimitrios.



**Figure 9**. Uphill Ieud. Susani. View. The oldest wood church in Romania; around 1343. Icon of Lord's Baptism.



Figure 10. Surdeşti. Wall painting. Sun symbol.



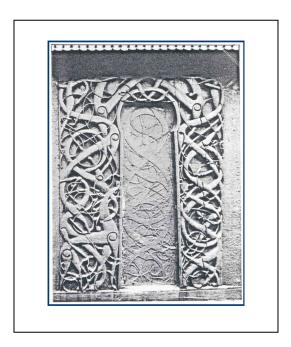
Figure 11. Lupşa. Wall painting. Moon symbol; rebuilt in 1700.

An agreeable interior environment results also from the decorative raw silk rectangular cloth with many-coloured embroideries that adorned the icons, but also the thick wool wall carpets dyed with vegetal colouring agents that are placed along the walls up to the faithful people's waists. They have a protective role during harsh winters, when winds blew through the beam gaps.

As far as exterior decorations are concerned, Romanian wood churches are provided with several crosses on roof ridges. Sometimes a crescent (half-moon) occurs below the tower cross, its corners upward, as a symbol of Christians' victory over Muslims in the regions that have known in history the fear of Turkish invasions. Such is the case with the wood church of Poienile Izei.

As regards the decorations in Norwegian wood churches, no anthropomorphic statues, icons or paintings are used given the Lutheran cult they adopted. In exchange they use inside the churches bright colours to paint the poles, the roof-supporting buttresses, the ceilings and benches. The greatest artistic achievements are however the wooden sculptures usually made to the doors and their frames, sometimes being more than 100 years old. The decorative patterns are vineyard stems making a highly intricate composition, flowers but also dragons fighting each other and coming certainly from the Viking art, (Figure 12).

Bestiary profiles (gargoyles from Gothic cathedrals) are noticed among the exterior decorations of Norwegian wood churches; these are located at the end of roof ridges and represent an inheritance from pagan customs. However a constant feature is the cock profile installed always on top of the highest church tower, as a symbol of Peter's denial of Christ.



**Figure 12**. Urnes. Wood sculpted door; around 12<sup>th</sup> century.

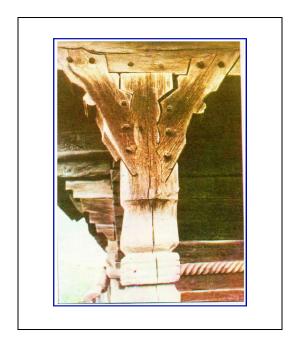
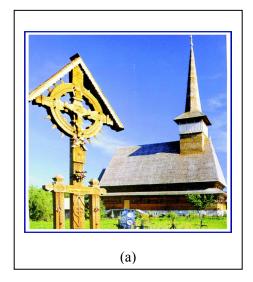
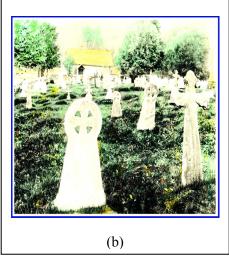


Figure 13. Pole joint to the roof in the church porch





**Figure 14**. (a) Dragomirești. Roadside crucifix with Celtic cross; around 1722; (b) Hardanger. Celtic crosses in the church cemetery; around 13<sup>th</sup> century.

Bells are used both in Romania and in Norway during the religious service, notifying by various acoustic signals the beginning of the service and its type. Bells can be installed in a separate building or even in the church tower. In Romania, unlike Norway, there is the custom to sound the 'toaca'- a wood plate hit with small hammers. The rhythm and intensity of hammer hits issue an encoded meaning, known by Christians from the times of their persecutions.

Outside, Romanian wood churches are often decorated with artistic sculptures to the doors and their frames, to the joints of porch poles and roof, as well as with the wooden belt sculpted as a twisted rope surrounding the church nave all around, symbol of boundlessness and of the ever-fleeing time, (Figure 13) [8]. A similar meaning is found in the shape of a cross with equal arms included into a circle whose outline is also like a twisted rope; initially a symbol attributed to Celts, it is met both in the burial places of Romanian churches (Figure 14a) and of Norwegian ones (Figure 14b) [9].

In Maramureş, Romania, some customs of particular charm can still be found, which have led to a folkloric event whose renown went past the country's frontiers. When the burial service is complete at the dead person's house, village people go to the church burial place and someone who knew better the deceased tells this one's good and bad deeds bluntly, in a moralising tone. Consequently, satiric verses are inscribed on the cross (where a naïve picture is also made), but humour is also present in them showing the deceased's behaviour in life. This is also known as the 'cheerful cemetery', a highly interesting tourist attraction that proves not only the inhabitants' moral sense, but also their fatalism, as they do not hesitate to laugh even at death (Figure 15).

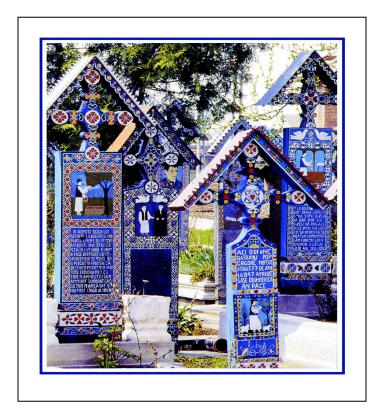


Figure 15. Sâpînţa, the cheerful cemetery.

Writer George Cristea has depicted very well the character of Maramureş inhabitants: "The peasant of Maramureş is deeply religious, he however does not show it off. He considers religion as an integral part of his life, like air and water. It is too common to talk of it every moment, and too important to forget it in everything he does".

# 3. Final considerations

The foregoing point out the manner in which the two communities of Romania and Norway, so distant from one another have responded to the same availability conditions of local building materials and have adapted to climatic rigours using similar engineering solutions when building their places of worship.

It therefore follows that human genius is not the monopoly of a certain community, but such communities have a mutual spiritual fund characterised by faith, morality, customs, concerns and artistic spirit.

Table 1. Comparative aspects for the wood churches of Romania and Norway

Criteria for	Romania	Norway
comparison	(Maramureş)	
Date when they became Christian	1 <sup>st</sup> -2 <sup>nd</sup> centuries after Christ	11 <sup>th</sup> century after Christ
The cult adopted	Byzantine Orthodox	Lutheran
General conditions	Big forests, source of wood for constructions	Big forests, source of wood for constructions
	Large amounts of snow during winter	Large amounts of snow during winter
Age of churches	Hundred-year old churches have been rebuilt in time. The oldest existing church-leud uphill (Susani), around 1364	The oldest existing church - Borgund, around 1150
Maximum size	Length 12-15 m Height Bârsana Nouă 57 m Surdești 54 m	Length up th 30 m Height Up to 30 m
Church foundation	Stone slabs and gravel covered with wood planks	Initially direct foundation on soil later made of stone. Poles founded directly in the soil
Constructive aspects	Highly steeping roof, with double hem, covered with tiles. One or two roof ridges. Nave made of horizontal beams. One tower. Transferable building	Highly steeping roof with a single gradient, covered with tiles. Multiple roof ridges. Walls made of vertical planks. One or several towers. Non-transferable building
Interior decorations	Icons, paintings, many- coloured rectangular cloths and wall carpets	Bright colours used for painting
Exterior decorations	Crosses on the roof; wood sculptures to doors, ropebelt on the nave, porch poles	Bestiaries at the end of roof ridges. Cock profile on the highest tower. Bells
Other elements	Bells and the plate sounded with little hammers. Equalarm crosses in a wheel. Celtic crosses. The cheerful cemetery of Săpînța	Bells. Equal-arm crosses in a wheel. Celtic crosses

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