# **Aspects of Sacred Geometry in Romanian Folk Art**

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**Abstract:** Sacred geometry is the science of geometric archetypes through which the visible forms of the known universe can be symbolized and synthesized. The combination of simple geometric forms that are studied and used in sacred geometry are the basis for the generation of all creation, including even the invisible, spiritual planes, the worlds of spirits, beings of light and Angels.

Symbols such as the rhombus and the cross are often found in Romanian folk art, architecture, and folk decorations. In sacred geometry, these shapes symbolize balance, order, and harmony. From a mathematical point of view, they are regular shapes with specific properties (for example, the rhombus has all equal sides and all equal angles). In popular culture, triangles or crosses are often used for protection against negative energies or to bring good luck. In mathematics, these shapes have precise properties and relationships between sides and angles, but in popular tradition, they are also symbols of spiritual power or symbolize cosmic balance.

This paper is a modest testimony of the rich symbolism of Romanian Folk Art, the huge amount of visual representations being the proof of an old culture and legacy.

**Keywords:** sacred geometry; Romanian Folk Art; folk art; symbolism;

# Introduction

Humanity has a rich spiritual tradition of studying geometric shapes that we find among the sacred geometry symbolism. In certain traditions, it was forbidden for the profane to draw the primary figures because there is a great risk that these symbols will be desacralized and discharged through profane use of their strong spiritual content. The key to the power of sacred geometry is precisely the mysterious surprise of the unlimited energetic and spiritual potential that a simple geometric shape hides<sup>3</sup>. This is by no means a simplistic, infantile vision, it is in fact an expression of wealth simplified, synthesized, reduced to essences, not a poverty of the spirit.

Due to the incredible power attributed to them, these geometric symbols were widely used in ancient times by mystics, shamans, and spiritual guides. For example, it is known how often the flower of life symbol was used and in how many cultural and spiritual traditions, its spread in time and space is surprising, the multitude of artifacts discovered all over the planet, in different eras, shows us the durability and freshness of the spiritual charge of the symbol.

According to Stephen Skinner, the study of sacred geometry has its roots in the study of nature and the mathematical principles that operate within it. Many forms observed in nature can be related to geometry, a simple example being the nautilus shell<sup>4</sup> which grows at a constant rate and thus its shell forms a logarithmic spiral by continually adapting the dimensions of the shell to

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<sup>&</sup>lt;sup>3</sup> Priya Hemenway. 2008. *The Secret Code. The mysterious formula that rules art, nature and science*. Koln: Evergreen GmbH, pp. 3-6.

that of the animal's body. Similarly, bees build hexagonal cells to store their honey. These and other correspondences are sometimes interpreted in terms of sacred geometry and considered to be further evidence of the natural significance of geometric shapes.

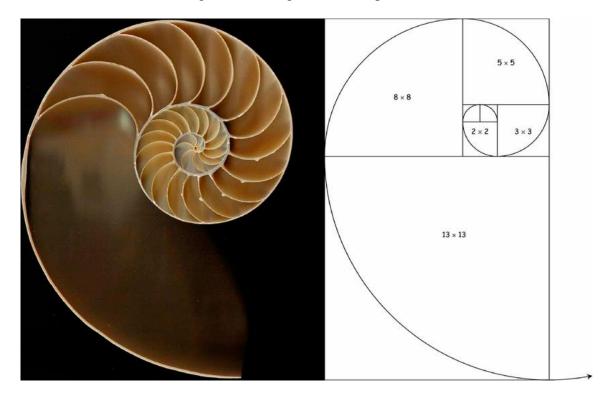


Fig. 1. *Nautilus Shell – Fribonacci secvence*, <a href="https://www.researchgate.net/figure/The-spiral-of-the-nautilus-shell-is-frequently-suggested-to-follow-the-Fibonacci-series\_fig1\_261249682">https://www.researchgate.net/figure/The-spiral-of-the-nautilus-shell-is-frequently-suggested-to-follow-the-Fibonacci-series\_fig1\_261249682</a>.

The harmonious forms in which nature manifests itself (for example, five-petaled flowers, starfish), often united under the name of "sacred geometry", have inspired the art and culture of indigenous peoples since ancient times. The walls of the caves located in the Aluniş – Nucu area of the Buzău Mountains present graffiti specific to local and European prehistoric cave art, illustrating ancient symbols: the pentagram, the right hand, various anthropomorphic representations, the triangle, the circle, the cross and other geometric figures.

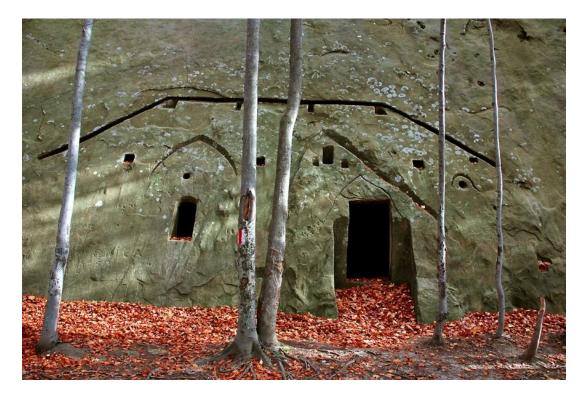


Fig. 2. Caves entrance in Aluniș – Nucu, <a href="https://cjbuzau.ro/vestigiile-rupestre/">https://cjbuzau.ro/vestigiile-rupestre/</a>.

## 1. The Specificity of Romanian Folk Art

Romanian Folk Art is a defining element of Romanian culture. With a tradition of hundreds of years behind it, folk art is a craft specific to the local area, which can say a lot about the customs and beliefs of a culture. Although it is no longer as widespread and practiced as in the past, there are still numerous craftsmen in Romania who still master the art. Dedicating their entire time to creation, they have not only remained faithful to the national spirit, but have even transformed it into a lifestyle full of purity and passion.

Situated at the border between creative craftsmanship and cultural heritage, folk art is a field that has stood the test of time, still being practiced today. Usually, traditional decorative objects do not bear the signature of their creators, being offered to craft lovers as a heritage of folklore and regional or national specificity. Because every element of folk art is handmade, it enjoys a reputation for uniqueness and originality.

Each ornament, each composition hides the state of mind of the creator, and we, even after years, find ourselves in them, because feelings, emotions in this case do not regress. Plastic graphics thus represent a special means of illustrating the spiritual potential of a people, which, together with speech and writing, with music and dance, encodes the synthesis of its thinking and feeling. In addition, it is a way of demonstrating the interdependence between thinking and language, between abstract and real, between coded and decoded. Regardless of the mode of expression or the type of ornament, each decoration that descends from an archetype has a symbolic meaning produced by the human unconscious.

Experts agree that the oldest motives in Romanian folk art are geometric, having their origin in things seen by man around him. Franz Sales Meyer offers an interesting perspective: "The seam joining, with the thread running obliquely, two parts of a garment, may have been the original of the zigzag line; the waves of water, the pattern of the wavy line; textiles, with any kind of warp or weft, may have been the original of the reticular patterns; and braided hair, the pattern of any braided band."<sup>5</sup>.

## 2. Aspects of Sacred Geometry in Romanian Folk Art

In traditional Romanian culture, each geometric shape can have a deep symbolic meaning. For example, the rhombus can symbolize balance and unity, crosses can have spiritual or protective connotations, and spirals represent evolution or natural cycles. Romanian embroidery is known for its complex and varied patterns, often including geometric patterns such as diamonds, crosses, spirals, circles, or straight lines. These patterns are not only decorative, but can also be interpreted geometrically and symbolically, with precise proportions and balanced symmetries. The embroidery and geometric patterns of Romanian ii, motifs also present in other forms of folk art, also reflect influences from various historical and cultural periods. For example, sacred geometry or traditional ornamental motifs it is integrated into the local folk art, reflecting the cultural and artistic heritage of the respective region.

#### 2.1. Axis Mundi - the Columns of Heaven

Axis Mundi<sup>6</sup> or The Column of Heaven can be framed as a primordial symbol of the connection between heaven and earth, belonging to the archaic culture. This primitive monument, in its various variants, was generated by an archaic Uranian religion and the cult of the cosmic tree; it is an archaic form of the monument that we know today as the troita. This Dacian-Romanian funerary pillar, identical to the Axis of the World, has as its equivalent the Tree of Life that grows in the Center of the World or in the Navel of the Earth.

Romulus Vulcănescu<sup>7</sup> mentions the Dacian funerary hair represented on Trajan's Column, a pilar that later transformed into a funerary column.

The concept of Axis Mundi has a wide scope in the ancestral symbols characteristic of Romanian folk art, an aspect that we will be able to observe throughout this work.

The funerary pillars constitute the most widespread category of mythical monuments used by Romanians. They are an integral part of the ritual pieces of the funeral, placed on the grave. Like other funerary stylomorphic signs, among which we mention the târşul, the spear or the arrow of the fir tree, the cross or the trident, the pillar is a symbol of the Column of Heaven which, in turn, is a substitute for the Tree of the World.

<sup>&</sup>lt;sup>5</sup> Sales Franz Meyer. 1988. *Ornamentica o gramatică a formelor decorative*. București: Editura Meridiane, p. 33.

<sup>&</sup>lt;sup>6</sup> Donald B. Carrol. 2023. Geometria sacră și simbolismul spiritual. București: Editura Prestige, p. 92.

<sup>&</sup>lt;sup>7</sup> See Romulus Vulcănescu. 1972. *Coloana cerului*. București: Editura Academiei Române, *passim*.

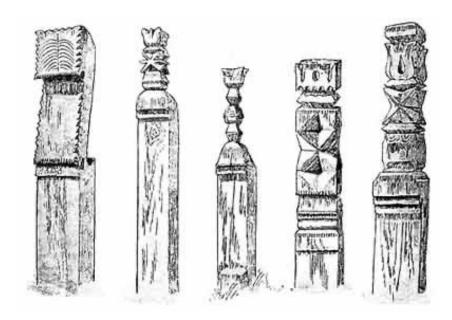


Fig. 3. Funerary pillars in Dacia, <a href="https://quadratus.wordpress.com/wp-content/uploads/2009/12/nepidiszitom1.jpg">https://quadratus.wordpress.com/wp-content/uploads/2009/12/nepidiszitom1.jpg</a>.

# 2.2. The Octagon

The lying figure eight is the symbol of infinity. The number eight is related to the octagon – an intermediate figure between the square and the circle and, as such, signifies the intermediate world, between the terrestrial one connoted by the square and the Uranian one, symbolized by the sky. The octagon is the flat geometric symbol of the Center; the numerical symbol is 8... Another flat geometric symbol attached to the Center is the stellated octagon. This symbol relates to the active, "functional" aspect of the Center. Through the Center, as all traditions affirm, the connection between Heaven and Earth is made. The flat geometric symbol of Heaven is the circle. The flat geometric symbol of Earth is the square. The flat geometric symbol of the Center is the octagon which makes the transition from the square (Earth) to the circle (Heaven) and vice versa.

We can see that in Romanian folk ornamentation this symbol is always linked to the Column of Heaven or the Axis of the World, which the Greeks and Romans designated as Polus Geticus, Axis Mundi and Carmines Mundi; Column of Heaven which in the material plane symbolizes the transition from Earth to heaven and vice versa as the octagon makes the transition from circle to square and vice versa. It is also interesting that the schematic shape of the octagon is the result of the juxtaposition of two crosses: the Greek cross (+) and the cross of St. Andrew (X). Now, the name St. Andrew derives from the masculine noun andros which in Greek means Man, and Man, as we saw above, is the designation of Zamolxe as Lord of the Center and King of the World.



Fig. 4. Painting on Egg – octagon, symbolizing God, the Heaven, <a href="https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/alb-317-Moldovita.jpg">https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/alb-317-Moldovita.jpg</a>.



Fig. 5. The space of complete sacredness, at the Humor Monastery, <a href="https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/simboluri-biserici\_04\_resize.jpg">https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/simboluri-biserici\_04\_resize.jpg</a>



Fig. 6. The space of complete sacredness on painted egg, <a href="https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/alb-579-d-PATRAT-ROMB.jpg">https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/alb-579-d-PATRAT-ROMB.jpg</a>.

## 2.3. The Cross

The cross appears in various forms in folk ornamentation and is much older than Christianity. The cross is primarily the skeleton of the octagon in its double form (+ and X) and of the swastika in its simple form of an inscribed horizontal cross known as the Greek cross.

In traditional symbolism the cross is assimilated to the cosmic tree because through the cross communication with heaven is achieved. In popular Christianity the Cross, made of the wood of the Tree of the Knowledge of Good and Evil, is identified or substituted for the cosmic tree; it is described as a tree that rises from earth to heaven, an eternal tree that stands in the middle of heaven and earth, firmly supporting the universe or the tree of life planted on Golgotha. On the other hand, numerous patristic texts compare the cross to a ladder, a column or a mountain, all symbols of the Axis Mundi or Axis of the World.

Even more so since the vertical cross (the crucifixion cross with the longer vertical arm and the shorter horizontal one) through its vertical axis represents precisely the axis of the worlds, and the horizontal one represents the terrestrial plane in which the principle descended along the Column of Heaven in manifestation manifests.

Another symbol of the Center is the horizontal cross which, however, relates only to a single plane of existence (the world) symbolizing the expansion of the world in question, starting from the center of the cross according to the image of the principle always symbolized by the central point of the cross. According to this principle of the horizontal cross, the Pelasgian-Hyperborean migration took place from the center to the four horizons.



Fig. 7. *Cross on porches from Maramureş*, <a href="https://motiveromanesti.ro/ornamentica-portilor-maramuresene/">https://motiveromanesti.ro/ornamentica-portilor-maramuresene/</a>.



Fig. 8. *Cross symbol on porch from Maramureş*, <a href="https://motiveromanesti.ro/ornamentica-portilor-maramuresene/">https://motiveromanesti.ro/ornamentica-portilor-maramuresene/</a>.



Fig. 9. *Cross symbol on painted eggs*, <a href="https://constantabusiness.ro/2024/04/11/vanatoarea-de-comori-cu-tematica-simboluri-pascale-intampina-sfintele-pasti-la-muzeul-de-arta-populara-constanta/">https://constantabusiness.ro/2024/04/11/vanatoarea-de-comori-cu-tematica-simboluri-pascale-intampina-sfintele-pasti-la-muzeul-de-arta-populara-constanta/</a>.

#### 2.4. The Rhombus

The rhombus is a primordial, very powerful symbol, represented on folk costumes in various patterns. Combined with skill, they gave a special beauty and power to those who wore the folk costume decorated in this way.

Archaeological discoveries have confirmed that the motifs used by folk artists in their creations are several thousand years old and that they have been passed down from generation to generation, up to the present day.

In our country, it is one of the oldest ornaments if we consider the horse phalanx found at Dubova, in the Iron Gates Region, a phalanx that has as its decoration a rhombus with the inside hatched with lines. It is considered the feminine symbol due to its resemblance to the vulva. At the same time, it is formed by two triangles and if their shape is long, it can signify the connection between heaven and earth and even the union between the sexes. Mărgărita Miller-Verghy emphasizes the antiquity of the ornament in Romanian folk art and at the same time makes an incursion into the history of humanity that can explain its antiquity and persistence in several cultures of the ancient world. She emphasizes its presence still in cuneiform writing as a sign for the sun, the representation being made by four equal lines placed around a center.

In the mountainous area of Buzău County, one of the most common decorative motifs on old seams is the spiral that forms a string of rhombuses. It is the shape that inspired Constantin Brâncuşi to design the Column of Infinity.



Fig. 10. Rhombus with unequal sides on a gate in Deseşti, Maramures County, mid-20th century, <a href="https://limbaromana.org/revista/motive-geometrice/">https://limbaromana.org/revista/motive-geometrice/</a>.



Fig. 11. *Rhombus motif on a woman's shirt, Maramureş, Valea Izai, mid-20th century,* <a href="https://limbaromana.org/revista/motive-geometrice/">https://limbaromana.org/revista/motive-geometrice/</a>.



Fig. 12. *The Path of Holiness (of the Gods) on the Romanian shirt,* <a href="https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/camasa-111\_resize-ROMBURI-BOGDANIA.jpg">https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/camasa-111\_resize-ROMBURI-BOGDANIA.jpg</a>.



Fig. 13. The symbol of the planet Venus (Luceafărul), the Protector of the Mountain (as a symbol of the first church), represented at the Bogdania Monastery in Rădăuți; we observe the repetition of rhombuses and, at the same time, a resemblance to the flower of life from sacred geometry, <a href="https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/simboluribiserici\_18\_resize.jpg">https://centrulculturalbucovina.ro/wp-content/uploads/2015/03/simboluribiserici\_18\_resize.jpg</a>.

## 2.5. The Circle

The circle is a symbol of regeneration and cyclicality. It represented the wheel of time, the repetition of the seasons, death and regeneration of nature. As an example, traditional clothing that uses the circle as a symbol can be worn to gain strength and wisdom after a difficult period.

Solar symbols and those related to the solar cult practiced in ancient times on the territory of our country are most often found in the decoration of Maramures gates<sup>8</sup>. Simple and concentric circles, rosettes, spirals, the whirlwind, diamond shapes (called wheels in the area), the coil are illustrations of the star of the day.



Fig. 14. *Rosette on the gate in the Maramureș area*, <a href="https://motiveromanesti.ro/ornamentica-portilor-maramuresene/">https://motiveromanesti.ro/ornamentica-portilor-maramuresene/</a>.



Fig. 15. Circles with a necklace of diamonds inside, Detail from a Gate in Sârbi, Maramureş County, early 20th century, <a href="https://limbaromana.org/revista/motive-geometrice/">https://limbaromana.org/revista/motive-geometrice/</a>.

<sup>&</sup>lt;sup>8</sup> Paul Petrescu. 1976. *Creația plastică țărănească*. București: Editura Meridiane, p. 39.



Fig. 16. *Circles made by excision on a gate in Deseşti, Maramures County*, <a href="https://limbaromana.org/revista/motive-geometrice/#\_ftn27">https://limbaromana.org/revista/motive-geometrice/#\_ftn27</a>.



Fig. 17. Chair back with circle decoration, Preluca Veche – Țara Chioarului – late 19th century, <a href="https://limbaromana.org/revista/motive-geometrice/#\_ftn27">https://limbaromana.org/revista/motive-geometrice/#\_ftn27</a>.

# 2.6. The Triangle

The triangle has one of the most comprehensive meanings. First of all, its symbolism is based on the number three and thus it is a representation of God<sup>9</sup>. In church painting, in cases where God is present, his halo will have the shape of an equilateral triangle. The equilateral triangle, when it appears alone, is a representation of the supreme divinity<sup>10</sup>, harmony and proportions<sup>11</sup>. The isosceles triangle with a large base that has an angle at the top of 1080 and those at the base of 360 degrees corresponds to the golden ratio<sup>12</sup>. The triangle with the top up represents the man and at the same time signifies the spirit, and the triangle with the top down represents the woman and fecundity. The base of the triangle leads us to think of stability while the sides that go up signify dynamism. Two overlapping equilateral triangles form the seal of Solomon, which is said to have been received from the heavens. The base of the seal touches the earth and its tip the sky, which symbolizes harmony, order, and continuous communication between heaven and earth.

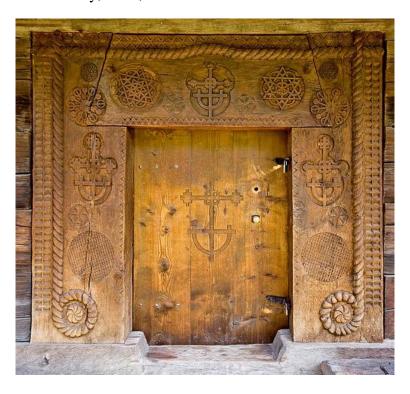


Fig. 18. Solomon's Seal on the access door to the monument church in Budeşti Josani, Maramures County, <a href="https://limbaromana.org/revista/motive-geometrice/#\_ftn27">https://limbaromana.org/revista/motive-geometrice/#\_ftn27</a>.

<sup>&</sup>lt;sup>9</sup> Adriana-Claudia Cîteia, Vasile Cacioianu. 2018. *Spațiul sacru măsurat*. Târgoviște: Editura Cetatea de Scaun, pp. 49-59.

<sup>&</sup>lt;sup>10</sup> Jean Chevalier, Alain Gheerbrant. 1994. Dicționar de simboluri, vol. 3. București: Editura Artemis, p. 384.

<sup>&</sup>lt;sup>11</sup> Priya Hemenway, op.cit., p. 53.

<sup>&</sup>lt;sup>12</sup> *Ibidem*. pp. 128-131.

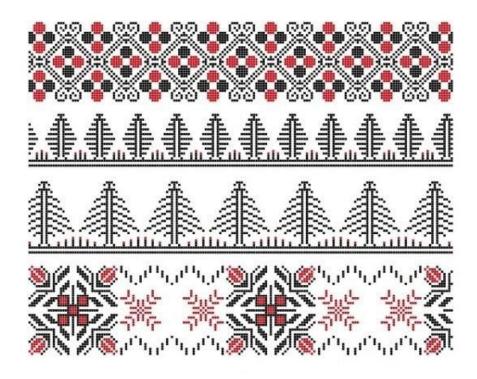


Fig. 19. *Examples of triangle motives in trees on embrodery*, <a href="https://www.ienationala.ro/blog/index.php/2021/06/22/modele-de-broderie-istoria-unei-culturi-ascunsa-in-ac-si-ata/">https://www.ienationala.ro/blog/index.php/2021/06/22/modele-de-broderie-istoria-unei-culturi-ascunsa-in-ac-si-ata/</a>.

# 3. Conclusions

Folk art represents a cultural indicator, capable of highlighting the features of a spirituality specific to different human communities, of national or universal scope. A defining part of the ethnopsychological and ethnocultural context, through the diversity of decorative motifs and symbols, specific to each social group and each era, folk art is representative in the culture of each people, because it indicates the level of artistry of the nation, the vision of the human collectivity on the world, as well as an ideological and symbolic mode of communication.

Today, when the process of globalization is spreading rapidly across all aspects of life, putting cultural identity in real danger, the study of folk art, as a defining element of cultural identity, especially by the younger generation, and here it is important to mention the education in the fields of art and culture<sup>13</sup>, becomes a necessity of the time, of undeniable importance through which the spiritual values specific to the space in which we were born are promoted.

Sacred geometry and Romanian folk art intersect through profound symbolism. In this aspect we observe a profound cultural and aesthetic understanding, constituting an art form in itself. In this framework, mathematics and local traditions meet harmoniously and meaningfully, reflecting a complex understanding of the world and the universal order within traditional

<sup>&</sup>lt;sup>13</sup> Alexandru Şerbănescu. 2022. "The Bauhaus Model and Artistic and Cultural Education in the contemporary European school". *Învățământ, Cercetare, Creație*, Vol. 8, No. 1. București: Editura Muzicală, p. 407.

Romanian communities. Knowing, understanding and keeping alive our heritage is the least thing we can do to honor our ancerstors.

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