

# THE PENTAGRAM AS A LIVING CROSS

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**Abstract:** The pentagram is a symbol present in most of the world cultures.

It is a symbol of the human being in action, a quintessence of the universal principles, but also a symbol of the evolution, of the becoming, of life after all.

This symbol must be regarded in relationship with another fundamental symbol: the cross, but not a cross of the crucifixion, rather a cross of the Resurrection, as a fundamental structure of the universe.

The use of pentagram in modern times must be interpreted under the aspect of its symbolic force, perpetuated in time. The possible interpretations must start from its fundamental meanings, defined in time.

**Keywords:** Pentagram, Cross, Symbol

## INTRODUCTION

### The symbolism of geometrical figures

The human being reflects, through one's structure, the whole universe. The universe that we live in is populated by symbols. The symbol is the language of nature. Life works with symbols and people express their vision through them.<sup>1</sup>

The human thinking itself has a symbolic structure. Thus, the perception offers a correspondent of the phenomenon perceived through the selection and adaptation of the stimuli. We observe in an object not only the simple appearance, but also the articulation of its skeleton, its structural scheme. The processing of the visual information is made by the segmentation, division of the objects or of the ensembles in simple geometrical forms.

The geometrical figures are images that reduce the truth to its essence, being a sketch of reality. They constitute a universal and symbolic language. In fact, they own the absolute symbolic language. The geometrical forms and figures generate vectors and energetic fields which influence our lives and our behaviour in the world.

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<sup>1</sup> Mikhaël Omraam Aïvanhov, *Le langage des figures géométriques*, Prosveta Publishing House, 2009, p. 12-17.

## THE PENTAGRAM

### History

The pentagon is the polygon with five equal sides. The pentagram, the star with five points, is obtained by uniting the points of the pentagon into a single continuous line. Starting from the top, the pentagram as a continuous line drawing is like making the sign of the cross.

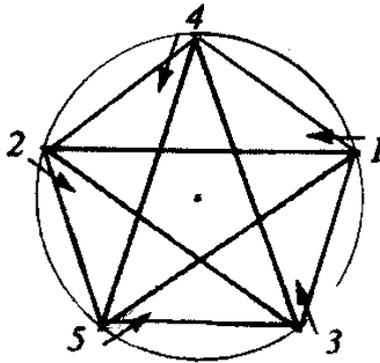


Fig. 1. Drawing pentagram

The word comes from the Greek *πεντάγραμμον* (*pentagrammon*) which means “having five lines”<sup>2</sup>.

The first use of the pentagram, discovered by historians, was around 3500 BC in Ur, in ancient Mesopotamia. Here it occurs in the ornamentation of the pottery and in the first manifestations of the written language (the Sumerian or cuneiform script), the pentagram signifying the sound *UB*, translated as “corner” or “angle”

In Ancient Greece, the pentagram had an important role, being considered a symbol of geometrical perfection. It was called *ὑγεία* “*Hygeia*” or “*Hugieia*” meaning “Health”, being identified with the goddess of health. The geometry and the significance of the pentagram were explored by the Pythagoreans. It was their recognition sign. Pythagoras’ journeys throughout the world (Egypt, Chaldea up to Indus) are an explanation of the fact that the early writings from Hindu and Buddhism seem to share Pythagoras’ point of view regarding the symbolism of the pentagram.

In the early Christianity, the pentagram was assimilated into the five senses and into the five wounds of Christ on the Cross. But, until the medieval period, it was a Christian symbol which was rarely used. It was associated to the truth and the work of the Creator. Emperor Constantine I

<sup>2</sup> <https://ro.wikipedia.org/wiki/Pentagram%C4%83>

used the pentagram together with a symbolic form of the Cross, as a seal and an amulet. The Church preferred to use the Cross, a symbol of the sufferance, rather than the pentagram, the symbol of truth. Along the centuries, the Church dropped the circumscribed pentagram and used the pentagram as a simple five-pointed star, most probably as a reaction to the neo-pagan use of the encircled pentagram.

In the medieval period, the pentagram with a single point upwards symbolized summer and the pentagram with two points upward symbolized winter. During the Inquisition, the pentagram was assimilated to “evil”, for the first time in history and it was considered a “witch’s Foot”. Along the years, a clearer distinction regarding the orientation of the figure was made. The pentagram with a one point upwards was associated to the spirit that governs the material (the spirit in the superior point, the four material elements: fire, air, water and earth being represented by the inferior points). The reversed pentagram, with two points upwards was interpreted as a material which dominates the spirit.

In the Renaissance, the graphic and the geometric symbolism of the pentagram became very important. In the Western civilisation, the pentagram becomes “The Star of the microcosms”, which symbolizes the man in the macrocosms, presenting the relationship between man and the universe.

In modern times, the pentagram or the pentagon started to be used to a great extent, from the presence on national flags (flag of Morocco, flag of Ethiopia) and as a symbol of several organizations and religious orientations to the architectural form of some important headquarters and urban routes (The Pentagon in USA, Governmental Centre of Washington D. C.). This must not be interpreted under the immediate aspect of the significance, but under the aspect of its symbolic force, perpetuated in time.

## **NUMERIC SYMBOLISM**

### **Number 5**

Number **5** is a symbol of man: man has five extremities (head, 2 hands, 2 legs); the hand has 5 fingers; the sensorial world is served by five senses (sight, hearing, taste, smell, touch).<sup>3</sup>

$$\mathbf{5 = 2 + 3}$$

Number **5**, as uneven number does not express a state, but an action; it is the number of harmony and beauty. It is the symbol of life, health and love.

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<sup>3</sup> Jean Chevalier, Alain Gheerbrant, *Dicționar de simboluri*, Volume 1, A-D, Artemis Publishing House, București, 1993, p. 314.

Number **3** is the first uneven number; it is **YANG**, a heavenly principle, masculine, spiritual. Number **2** is the first even number **YING**, feminine principle, earthly, material, matrix.<sup>4</sup>

Five is the unification of these two principles, the Pentagram is the unification of the unequal things, the condition of the androgynous, symbolizing marriage, happiness, fulfilment; it is a sign of unity.<sup>5</sup> For the Greeks, **5** is the number of love, the number of Aphrodite, the goddess of the fruitful unification, the abstract archetype of the procreation.

Number **5** expresses the communion of the earthly principle with the heavenly one<sup>6</sup>; it is the number of the centre, of unity, of harmony and balance.<sup>7</sup> Hence, the pentagram is a force generated by the synthesis of some complementary forces.<sup>8</sup>

$$5 = 2+1+2$$

**1** is an element of bonding and transition, it maintains the balance; it enhances the transition from microcosms to macrocosms<sup>9</sup>.

$$5 = 4+1$$

In the Chinese culture, there are four elements (water, air, fire, earth) to which **1** is added (The Universal Spirit). In the Chinese architecture, the vertical support element, the pillar, continues with **4** smaller elements which support the structure of the roof. It is one of the main features of the Chinese architecture which distinguishes it from the Western architectural systems.

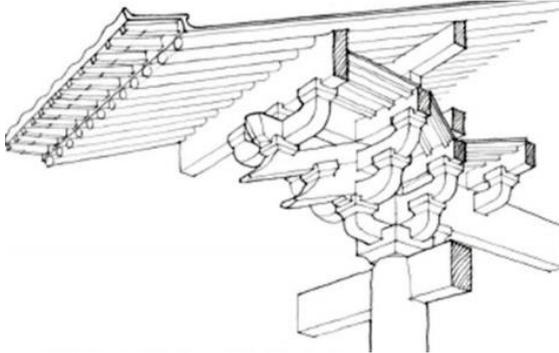


Fig. 2. Chinese structural element (dougong)

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<sup>4</sup> Matila C. Ghyka, *Filosofia și mistica numărului*, Univers Enciclopedic Publishing House, București, 1998, p. 100.

<sup>5</sup> Jean Chevalier, Alain Gheerbrant, *op. cit.*, Volume 3, P-Z, Artemis Publishing House, București, 1993, p. 65.

<sup>6</sup> *Ibidem*, Volume 1, A-D, p. 310.

<sup>7</sup> Solas Boncompagni, *Lumea simbolurilor*, Humanitas Publishing House, București, 2003, p. 69.

<sup>8</sup> Jean Chevalier, Alain Gheerbrant, *op. cit.*, Volume 3, P-Z, p. 66.

<sup>9</sup> Solas Boncompagni, *op. cit.*, p. 69.

## THE PENTAGRAM AND MAN

Between the human silhouette and the pentagon, there are visual correspondences which, in art, have been observed from ancient times. The first documents date back to the Middle Ages. In the album of Villard de Honnecourt(13<sup>th</sup> century), a 33 page manuscript of parchment with drawings, the human figure occurs superposed over the structure of the pentagon. The architect sketches the man performing different activities, structured according to the pentagram.

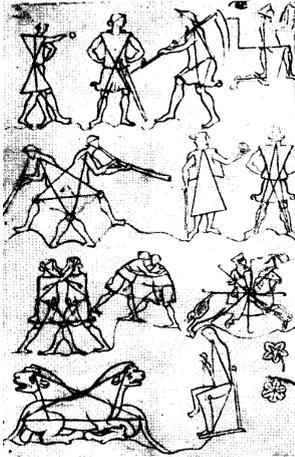


Fig. 3. Geometric studies and traces



Fig. 4. Geometric mnemonic traces

In these drawings, the man appears not in his youth, but as an adult, aware of his knowledge and force. These are images that symbolize the union between science and conscience.<sup>10</sup>

An illustration from a work which appeared in 1533, *De occulta philosophia libri tres*, ascribed to Henry Cornelius Agrippa von Nettesheim, presents a man inscribed in the pentagon, with the five extremities in the points of the pentagram.<sup>11</sup>

Later, Matila Ghyka will demonstrate, using a concrete example, this perfect figurative relationship between the human silhouette and the pentagon with a photograph in which the adult man appears with his arms wide open and his legs spread, the extremities of the human body being

<sup>10</sup> Maurice Vieux, *Lumea constructorilor medievali*, Meridiane Publishing House, București, 1981, p. 81, 82.

<sup>11</sup> H.R. Radian, *Cartea proporțiilor*, Meridiane Publishing House, București, 1981, p. 242.

exactly in the points of a pentagon inscribed in a circle having the centre in sex.<sup>12</sup>

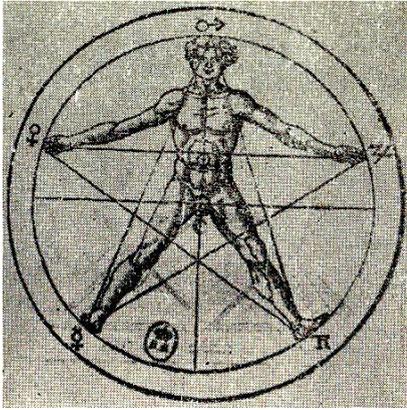


Fig. 5. Man microcosm

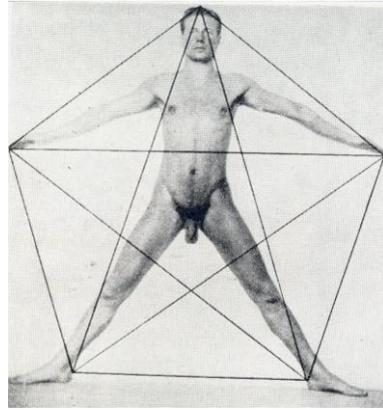


Fig. 6. Organic growth of pentagon

Of course, this perfect fit in the pentagon of the human silhouette extended in all directions, has greatly contributed to the symbolic message of this figure. The Pentagram *with one* point upwards represents the man in action, whose thinking is directed to God. It is the sign of the animated life.<sup>13</sup> The small and the big pentagram that can be found in the same geometrical figure represent the microcosms and the macrocosms.

The pentagram is the manifestation of the adult man, at the peak of his biological and spiritual evolution.<sup>14</sup> According to the Christian faith, the five-pointed star guided the three kings on their way to baby Jesus and stopped where the baby was born. Hence, the five-pointed star is the symbol of the perfect man, of the incarnated God.<sup>15</sup> Aïvanhov states that the pentagram is “*the skeleton of an astral spirit*” Jesus being a living pentagram.<sup>16</sup>

The orientation with one point upwards is preferred, most probably, because in this figure, the man is perfectly inscribed and also because it suggests a more stable situation. The inverted pentagram represents man with his head downwards that is the man that is not subjected to the divine order, hence the evil symbolism.<sup>17</sup>

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<sup>12</sup> Matila Ghyka, *Estetica și teoria artei*, Editura Stiințifică și Enciclopedică, București, 1981, Figure 23.

<sup>13</sup> Mikhaël Omraam, Aïvanhov, *op. cit.*, p. 101.

<sup>14</sup> Jean Chevalier, Alain Gheerbrant, *op. cit.*, Volume 1, A-D, p. 310.

<sup>15</sup> *Ibidem*, p. 91.

<sup>16</sup> *Ibidem*, p. 102.

<sup>17</sup> *Ibidem*, p. 99.

## **THE PENTAGRAM AND THE CROSS**

As a symbol of man, the pentagram may be regarded in relation to the cross. The cross is the expression of the masculine and feminine principles, the fundamental principles that meet to work together in the universe. It is composed of the two main directions of space: vertical and horizontal. The vertical line represents the fire that rises; the masculine sign, positive, active. The horizontal line represents the water that flows, slides, spreads; the feminine sign, negative, passive. The centre of the cross, the intersection point that holds the two forces together, represents the union of the contraries. Within the cross, the two principles (masculine and feminine, positive and passive, the emitter and the receiver, spirit and material, intellect and heart) meet and work together in the universe.<sup>18</sup>

The cross represents the man himself<sup>19</sup>: the man with his arms wide open horizontally becomes a cross. The cross is a cosmic symbol: it includes the movement of the water and fire and also the four cardinal points, the four directions in space.

In China the number of the cross is five.<sup>20</sup>

From a dynamic point of view there is a difference between the vertical and the horizontal cross.<sup>21</sup> The cross with equal arms requires a horizontal positioning being in agreement with the uniform action of gravity. It is the Greek cross, the cross-in-square, present in the planimetry of the Byzantine churches. The Latin cross, with the inferior arm longer is in conformity with the action of the gravitational attraction only in vertical position. That is why it is a symbol of the crucifixion.

The two different uses of the cross prove the dual and complex symbolism of this sign.

### **The cross. Significance**

The cross is a universal, totalizer sign, a cosmic symbol. It has a synthesis and measuring function: it unifies the earth and the sky, the time and space.

The man with his arms open, like a flying bird, represents the cross.

Saint Bonaventura compares the cross with the *Tree of life*, a universal symbol of the cosmic evolution.<sup>22</sup> The cross has a cosmic meaning

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<sup>18</sup> Mikhaël Omraam Aïvanhov, *op. cit.*, p. 118.

<sup>19</sup> *Ibidem*, p. 120.

<sup>20</sup> Jean Chevalier, Alain Gheerbrant, *op. cit.*, Volume 1, A-D, p. 310.

<sup>21</sup> Rudolf Arnheim, *The Power of the Center*, University of California Press, Berkeley, Los Angeles, London, 1983, page 12.

<sup>22</sup> Jean Chevalier, Alain Gheerbrant, *op. cit.*, Volume 1, A-D, p. 403

through the 4 cardinal points suggested; it is a crossroads between the way of life and that of death, a symbol of the world in its wholeness.

The cross must not necessarily be associated to death and sufferance. It represents the entire creation, the nature, man himself, the entire universe being a cross.<sup>23</sup> There is the cross of the passions linked to the crucifixion, sacrifice, Jesus' passion, but there is also the cross of the Resurrection linked to the resurrection, ascension, victory upon death (the cross of glory).

## THE PENTAGRAM, THE SACRED SIGN

### The golden proportion

The pentagram has surprising graphic qualities that no other geometrical form possesses. The pentagon has an organic growth due to its embedded golden proportion. The pentagram is a vivid figure that multiplies itself unexpectedly. By the simple following of certain routes (prolonging the sides of the pentagon or of the stellar pentagram) occur, unexpectedly, many pentagons/pentagrams, which may be larger or smaller. Thus, the pentagon or the pentagram proves to be a living figure that seems to give birth.

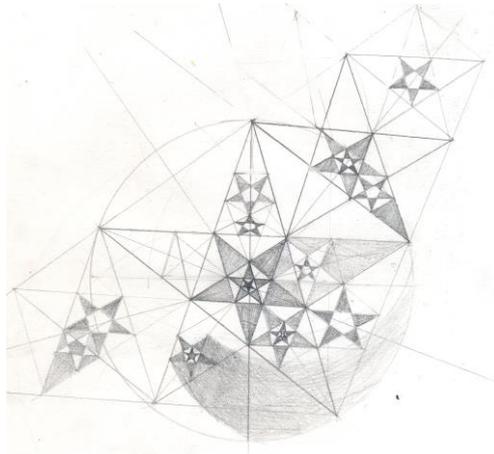


Fig. 7. Human silhouette and pentagram

The organic growth of the pentagon or pentagram may be explained by the presence, in their structure, of the golden ratio.

The golden proportion, a guarantee of the absolute harmony, may be found in all the human creations characterized by harmony. It maintains a constant ratio between the parts and the whole, but also between the very

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<sup>23</sup> Mikhaël Omraam Aïvanhov, *op. cit.*

parts. It may be found, as an aesthetic ratio, in all the artistic creations, no matter if the artists looked for it consciously or deduced it intuitively.

Moreover, this proportion may be found in all the living organisms whether vegetal or animal. It is a law for harmonious growth, in fact, a proportion of organic growth. We are speaking about a vivid growth which produces successive forms, homothetic, as a genetic program. Maybe this is the reason why it was called *God's proportion*. Fra Luca Paioli called it *divina proportione*, Leonardo da Vinci *sectio aurea* and Kepler *sectio divina*.

In the pentagon, the ration between the diagonal and the side is the golden number.

In the decagon (derived from the pentagon), the ration between the radius of the circumscribed circle and the side is the golden number. Similarly, the ration between the diagonal and the radius is the golden number as well.

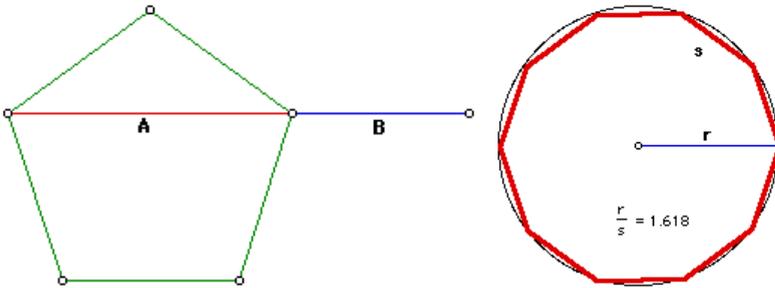


Fig. 8. The golden section of pentagon

The pentagon and the pentagram also contain golden triangles. The golden triangle is an isosceles triangle which has the ration between the sides equal to the golden number. It occurs with its two variants within the structure of the pentagon: the acute triangle with the value of the golden number between the side and the basis, and the obtuse triangle with a golden ration between the basis and the side. This triangle has the same feature of multiplication that can be found in all the figures which possess the golden ratio, also generating a spiral of harmonious growth.

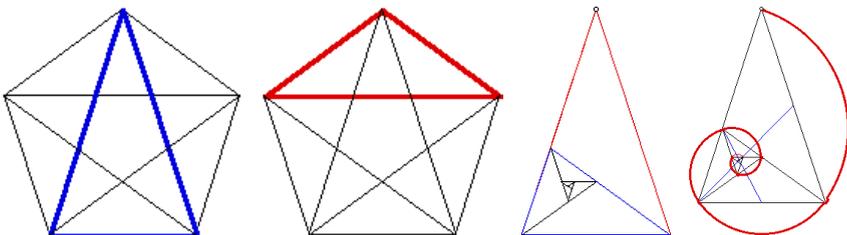


Fig. 9. Golden triangle

## CONCLUSIONS

The pentagram is one of the oldest symbols, present in most of the world cultures. It is the symbol of the human being in action. It is a symbol of the evolution, of the becoming, of life. It may be linked to a fundamental symbol: the cross.

Man is a vivid pentagram. The pentagram with one point upwards (pointing upwards) represents man in action, man whose thinking is directed to God. The inverted pentagram (pointing downwards) is synonymous with the inverted cross and represents man with his head down, an unnatural position, a man which comes against nature, divinity.

Thus, the pentagram is a vivid cross.

The nowadays presence of the pentagram, as a representative sign of several systems and organizations, must be regarded only under the aspect of its symbolic power, perpetuated in time. The symbolic interpretation must be developed only from the point of view of the profound significances, in correlation with the other fundamental symbols.

### List and source of illustration:

**Fig. 1:** Drawing pentagram, Aivanhov Mikhaël Omraam, *Le langage des figures géométriques*, Prosveta Publishing House, Izvor Collection, 2011, p. 12-17

**Fig. 2:** Chinese structural element (dougong), HackneyedScribe, 2015, <http://historum.com/general-history>, downloaded 21 03 2016

**Fig. 3:** L'album de Villard de Honnecourt, *Geometric studies and traces*, Claude Gagne <http://medieval.mrugala.net/Architecture/Villard%20de%20Honnecourt/>, downloaded 19 03 2016

**Fig. 4:** L'album de Villard de Honnecourt, *Geometric mnemonic traces*, Claude Gagne, <http://medieval.mrugala.net/Architecture/Villard%20de%20Honnecourt/>, downloaded 19 03 2016

**Fig. 5:** Agrippa von Nettesheim, Man microcosm, 1533, Ghyka Matila, *Estetica și teoria artei*, Editura Stiințifică și Enciclopedică, București, 1981, Figure 17

**Fig. 6:** Valentin Hiuban, Organic growth of pentagon, personal collection

**Fig. 7:** Matila Ghyka, Human silhouette and pentagram, Ghyka Matila, *Estetica și teoria artei*, Editura Stiințifică și Enciclopedică, București, 1981, Ill. 23 (foto Manasé)

**Fig. 8:** The golden section of pentagon

**Fig. 9:** Golden triangle, [https://en.wikipedia.org/wiki/Golden\\_triangle\\_%28mathematics%29](https://en.wikipedia.org/wiki/Golden_triangle_%28mathematics%29), downloaded 19 03 2016

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