

Restitution of the initial model

A new way of doing icons

# Vladimirskaya

Preparation of a copy  
with Tencho Stalev

Yvo Jacquier

COMPARATIVE GEOMETRY

July 2014

# PRESENTATION

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# The letter from Yvo to Tencho

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Dear Tencho,

There is so much hope in this meeting !

You paint the eyes with a rare intensity when I restored what mathematicians call « Geometry with Eyes ». We have no language in common, but this gives even more importance to our eyes, as painters.

We wish to combine these looks. We feel close one to another, we are driven by the same faith and we have the same desire to do well. Our mission as Christians means at first painting, and we want to catch this meaning. Together, we feel us, we will be stronger.

This July 17, I celebrate my engagement in art. I started in 1980, there was exactly 34 years. I like very much the idea to undertake work with you at this precise time.

You have the mastering of the material and you are accustomed to the subjects, thanks to a very long experience of the icon. You're "the perfect specialist". From my side, I bring a new understanding of art with the composition. I studied only a few subjects, but in depth. « The Holy Trinity » by Andrei Rublev, the two versions of « Vladimirskaia » and a Byzantine « Transfiguration of Christ » dating early XIII<sup>th</sup> century.

We will combine our skills and become a student, one of another. For my part, I rejoice because with you I will find back the sensations which I missed during this long process of study.

So this is the time for our work, as the way to give meaning to our lives.

Very cordially,

Yvo

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# Vladimirskaya - Some history

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Gift of the Patriarch of Constantinople to the great prince of Kiev in 1130, the "first" Madonna of Vladimir resides at the Tretyakov Gallery in Moscow. She finds every year its traditional place on the iconostasis of the Cathedral of the Dormition in the Kremlin.

A copy of this pattern, executed in the early fifteenth century, is at the [museum of Vladimir-Suzdal](#). This second icon deviates slightly from the Byzantine model. Its shapes are not the same, and the changes are made by a Russian school which emancipates.

NB : *Constantinople will pass under Turkish rule in 1453, causing a second migration of the Byzantine culture toward northern Italy : this is the Renaissance. Thus we will find some elements of composition of the Holy Trinity (Rublev) in the Tarot de Marseille.*

Russian arts maintain specific links with four successive epochs. We find the major steps in the terms of the exhibition « Holy Russia » at the Louvre Museum in 2010. The exhibition is divided into eight sections :

First period (eleventh century - early thirteenth century)

I / Conversion

II / The first golden age.

Second period (thirteenth century)

III / The time of the Mongols

IV / The major artistic centers (Novgorod, Pskov, Tver ...).

Third period (mid-fourteenth century - fifteenth century)

**V / The emergence of Moscow**

VI / The Century of Ivan the Terrible. Moscow third Rome.

Fourth period (seventeenth century)

VII / The Time of Troubles (1598-1613)

VIII / The seventeenth century,

from Michael Romanov to Peter the Great.

The icon that we approach might be from the hand of Andrei Rublev. Sacred Geometry then peaked and this is a major interest of this piece, of which the conservation allows a precise reconstruction. This is not really the case of the "first" Madonna of Vladimir, who has been its model. This icon went through all the hardships of the Russian people, as a talisman. Even Stalin asked its protection while Nazi troops were threatening the city of Moscow.

# COMPOSITION

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# THE BASIC STRUCTURE

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## The Grid

Any icon's composition (more generally, sacred geometry) unfolds on a grid. This grid is used to construct, to understand, to measure and to remember the figures. The unity of the grid is the diapason of the work.

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-00.jpg>

We'll find out, the work is 5 units high for  $2\phi$  width.

We will see with the interpretation that 2, 5 and  $\phi$  are the major elements of the symbolic vocabulary in "Vladimirskaya II" (reflection of the first, "Vladimirskaya I").

## The golden proportion - Golden ratio - $\phi$

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-01.jpg>

The child Jesus gives the measure : a golden rectangle that is 2 units wide by  $2\phi$  height. This rectangle is the natural golden rectangle of a triangle 3-4-5 : <http://www.art-renaissance.net/triangle-sacre/212-bis.jpg>

Its diagonals intersect on the umbilicus of the child, and the thumbs of his mother indicate the two vertical sides.

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-02.jpg>

This rectangle is duplicated and from the center of the first, it seeks the top right corner of the work.

Remark 1 - Here we consider the inside of the bowl - without the bevel of the wood. Further down the painting invades the bevel.

Remark 2 - The position of the right eye, like placed on the intersection of two rectangles. [This position will be subsequently confirmed.](#)

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-03.jpg>

This new rectangle is the natural part of a square side  $2\phi$  which fits with three side edges of the work (in blue).

## The first key of the composition

In this work, the first key of the composition is reduced to a '1' of one unity. This vertical segment establishes a connection between the golden figure that we just built and the figure of triangle 3-4-5 that we will discover.

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-04.jpg>

The great square side  $2\phi$  is divided into nine equal parts (in green) - three in height and three in width. The point of intersection of two lines is at the base of the head of Christ. It serves as a reference to a unit, placed vertically, which leads down to a second important point.

## The triangle 3-4-5

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-05.jpg>

This second point is the center of the inscribed circle of a triangle 3-4-5, turned at  $45^\circ$ . The vertical segment of the unity serves as liaison between the golden figure and the triangle. The whole constitutes the structure. Note: Recall that the radius of the inscribed circle is 1.

## The structure Gold + Triangle

The basic structure. We will enter the aureolas and the cross :

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-06.jpg>

## The measure of Mary

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-08.jpg>

The Icon is often dressed in a coat of metals and precious stones called Riza. It sets apart the flesh. In addition, the hands are the best way to deliver information on the composition. In this case the measurements of  $\sqrt{3}/2$  and  $1/\phi = \phi - 1$ .

The two major irrational values of sacred geometry are exposed here, reduced to the scale of the hands (the entire values would be too large). The symbolic interpretation should be cautious towards the location right/left of these measures.

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# The mandorla of 5

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## Rational & Irrational

5 is one of three major values of this work, with 2 and  $\phi$ , but the observation is not enough to put this value as a measure in the work. Only the height of the icon is 5, but this argument of composition remains limited.

Here we must think as symbolists. The interpretation, third aspect of Comparative Geometry, will inspire the Composition (second aspect) like this one inspires the Mathematics (first aspect).

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-10.jpg>

This mandorla of circles diameter 5 is in the great tradition of Sacred Geometry, particularly Byzantine. The general principle is clear. The exact vesica piscis is the privilege of Venus (the center of a circle is placed on the line of its twin circle). In representations of the Christ, the centers are free, within the mandorla. We consider the inscribed rectangle whose verticals pass through the two centers. And this is that rectangle that characterizes the mandorla.

In this figure, all the values of construction are rational, including the large rectangles with their proportions  $5/4$  and  $4/3$ . These values are naturally based on 5 and 2 ( $4 = 2^2$ ). Remarkable property : the vertical inscribed rectangle has the ratio of  $2\sqrt{3}$ . It therefore consists of two rectangle superimposed, with the proportion  $\sqrt{3}$ . Note: The height of this rectangle is that of the almond in a perfect vesica piscis.

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-11.jpg>

The rectangle splits to build a cross which completes the figure. It is then placed in the middle laterally, and vertically it clings to the top of the 'I' (that is used to place the inner circle of the triangle). Mary's hand literally supports this cross, and the tip of the almond is exactly at the top of her head.

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-12.jpg>

Under these conditions, we can now understand why a part of the robe of Mary comes beyond the strict framework of the Icon : they invade the bevel to reach the circles at the bottom of the painting.

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# AUREOLAS

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## The aureola of the Madonna

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-07.jpg>

- Its diameter is  $\varphi^2 = \varphi + 1$
- Its center is on the side 3 of the triangle.

• At the distance  $\sqrt{5/2}$  from the right side of the square ( $2\varphi$ )

This distance is obtained by confronting the diagonals of a simple square ( $\sqrt{2}$ ) and a double square ( $\sqrt{5}$ ) according to the figure, with the

ruler and compass : <http://www.andrei-rublev.com/Vladimirskaya/Division.jpg>

Another proposal is in concurrence, or it completes this disposition :

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-09.jpg>

Between the horizontal axis of the cross and the center of the aureola, the distance is  $\varphi$ .

[http://www.andrei-rublev.com/007-Phi\\_Phi2.jpg](http://www.andrei-rublev.com/007-Phi_Phi2.jpg)

Two golden rectangles, value  $\varphi$  by  $(\varphi + 1)$  intersect in the heart of the aureola of the Madonna, and they draw a square of side  $\varphi$ .

[http://www.andrei-rublev.com/008-Carre\\_Phi.jpg](http://www.andrei-rublev.com/008-Carre_Phi.jpg)

The rising diagonal of the white square is in the exact extension of segment 3, celestial, of the triangle. The golden division of the same square emphasizes the left eye of Mary, while her right eye (which interests so much the specialists) finds its place on a diagonal of a quarter of the same square.

## The aureola of the Christ

<http://www.andrei-rublev.com/009-Aureole-Christ.jpg>

The aureola of Christ simply hooks to the golden rectangles of the Madonna, like Jesus to the neck of his mother. The algebraic expression of the diameter is complex :  $\sqrt{[\varphi+3(\varphi+1)]\div 2(\varphi+1)} \approx 1,175...$  While its geometric construction is simple. The left hand of Christ knights the composition : a golden diagonal.

<http://www.andrei-rublev.com/010-Vesica-Piscis.jpg>

This same circle fits perfectly inside the edging of the veil of Mary, and form a Vesica Piscis. The aureola of a divine essence becomes here the human face of the mother and they have a kiss at the center. The tip of the triangle is on the second circle. The left hand of Christ is in the circle of his mother.

# INTERPRETATION

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# THE READING OF NUMBERS

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Consider the visuals :

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-06.jpg>

[http://www.andrei-rublev.com/004-Triangle\\_Sacre-Rectangle\\_or.jpg](http://www.andrei-rublev.com/004-Triangle_Sacre-Rectangle_or.jpg)

As we announced, the most important values of this icon are 2 (mother and child), 5 (the God who became a man through a woman), and the golden ratio  $\phi$  (male and terrestrial,  $\phi$  faces symbolically to  $\sqrt{3}$ , feminine and heavenly).

The circle\* of radius 1 shows the body of Christ. Its symbolic is solar and this Host evokes the Eucharist, as the celebration of the sacrifice of Jesus Christ.

(\*) - The inscribed circle of the triangle 3-4-5 is called "intime circle" (by Christophe de Cène, who generously contributed to this interpretation) because the essential is inside.

NB : the painter has placed like an echo at the back of the Icon, the instruments of the Passion of Christ.

**2** is the width of the golden rectangle. The thumbs of Mary materialize this number. This 2 makes sense when it comes to the Mother and her child.

The line **3** of the triangle is a celestial axis. It highlights the look both feminine and sacred of Mary, Queen of Heaven, and the head of Jesus. This axis intersects at right angles the terrestrial axis **4** where Jesus sits, supported by her mother's hand.

NB : it should be noted that the major values mentioned about the painting translate into figures' measures (canons\*) when others are manifested in another way (axes, surface, slope etc.). (\*) Canons are worthless without the structure !

**5** is omnipresent. This is the length of the hypotenuse of the triangle, but in this precise case, the indication is minor. The slope of 7/1 reveals the quintessence of divine and yet always present in the believer's heart action. The side 5 of the triangle, as human measure, is inclined to communicate according to this number 7.

NB : the number **7** is attributed to Venus, and esotericism consider Mary as his heavenly representation. This "inclination" of the hypotenuse passes through her heart - it is in the middle.

**6** is the number of universal love, the union of opposites and complementary in this world. This number represents the surface of the triangle : the essential part of the Savior. Love, fruit of the encounter between Celestial and Terrestrial, expressed by the Triangle 3-Sky, 4-Earth, 5-Man as the link between Heaven and Earth, in the surface 6

$\phi$  - The child Jesus is entirely in the golden rectangle, but the top of his head, his right hand and his clothes grow outside of the triangle. That is the artistic expression of his triple radiation on Earth: spiritual (head) human (hand), and finally material (cloth). The incarnation takes on three complementary aspects.

NB : another equally important point : Jesus-Christ puts his chin on the golden bisector, which comes from the spirit of Mary (her temple), and she is linked by thought with the body of her son.

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# The keys of the Composition

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<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-04.jpg>

The first key to the composition, the vertical 'I', connecting the golden figures with the triangle 3-4-5, is the simplest possible. Make no mistake, at the time of this second Madonna of Vladimir, the great Russian school of sacred geometry is at its peak. This could not be a regression. The first Vladimirskaya talks about the time, and the solar 'I' reminds us that Christ is incarnated on Earth to live a solar time (cyclical) in opposition to the Saturnian time. The square 3x3 where the 'I' is anchored refers to Saturn (his 3x3 magic square).

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-11.jpg>

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-07.jpg>

The second key of the composition is a segment of  $\sqrt{5/2}$  which allows you to place the aureola of the Madonna (its center) on the side 3 of the triangle. The interpretation of this value is beyond the limits that binds the Comparative Geometry. However, it would be difficult to identify this segment without any consideration about the symbolic of numbers. The 5 human and the 2 of the mother-child relationship express all their mystery. The division  $(5/2)$  states the human "to the extent" of the relationship. Then the square root is the expression of the mystery, of the origin, of what is upstream.

NB : The Madonna touches by her fingers the vertical at  $\sqrt{5/2}$  from the edge, like she touches the edges of the golden rectangles by her thumbs.

NB : we can link the developments of golden ratio [ $\varphi = (1+\sqrt{5})\div 2$ ] to the number 5, as well as the pentagram (its measures include  $\varphi$ ). However in this case,  $\varphi$  is a real player facing 2 and 5 which enter within its "digital code".

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-09.jpg>

The vertical segment of  $\varphi$  is also a possible key for this aureola...

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# The Mandorla of 5

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<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-12.jpg>

This figure is probably the one where the lyricism of commentators will be the most generous.

The mandorla enters conventionally in the representations of Christ, especially those of "Enthroned Christ" and "Transfiguration". In this particular case, it does not appear explicitly in the work, and stays implicitly in the composition.

If the inscribed rectangle is part of the usual vocabulary, this mandorla is distinguished by another peculiarity : the dress of Marie picks the circles outside the almond. It should be noted that without this figure, it would be difficult to understand the excesses of the painting, outside of its strict framework within the bevel.

This overflow is a symbol in itself, concerning the Iconographers as well as the subject of the icon. Marie surpasses the scope of representation as well as her simple role as a mother. She becomes the space where the Christ is revealed, where he appears.

This magnitude is beyond a principle that expresses majesty (according to tradition) in vertical. The Icon places this essential affirmation in width, horizontally, and at the base of the work - of its five vertical units.

The  $\sqrt{3}$  is here at work for the first time. This value is the most mystical : the mystery of the Trinity, "reason of heaven" inaccessible and timeless. Mary seems to compare the golden ratio as if she weighed their respective weights in each hand. Unless she emphasizes their complementarity, another image of an ubiquitous 2. The mission, the fate of Christ, is in the horizontal axis of Action (right arm) and the vertical axis of Love (left arm).

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-09.jpg>

<http://www.andrei-rublev.com/Vladimirskaya/Vladimir-composition-07.jpg>

Finally the double fixedness of the aureola of the Virgin is the subject of meditation where we leave the reader. One of the two options is enough, they are both admissible. The center is  $\phi$  above the axis of the cross and  $\sqrt{5/2}$  from the edge of the work - on the side 3 of the sacred triangle.